

FAR EASTERN ECONOMIC REVIEW

Vol. XXI

Hongkong, September 20, 1956

No. 12

Private School Education in Hong-kong	357	China	Education of Overseas Chinese ..	369	Thailand	Thailand's Cultural Traditions and the Modern World	381
Five Per Cent Interest for Investors in China	359	Taiwan	Tea Production in Taiwan	371	Thailand	Thailand's Foreign Trade	383
Japan		Cambodia, Laos & Vietnam	Economic Survey (Part II)	374	Finance & Commerce	Hongkong Exchange Markets	384
Underground Expansion of Tokyo	360		Natural Resources of Cambodia ..	378		Hongkong Share Market	385
Petrochemical Industry in Japan	361	Philippines	Minerals in the Philippine Economy	379		Singapore Share Market	385
The Cement Industry (Part II)	364					HK & FE Trade Reports	386

PRIVATE SCHOOL EDUCATION IN HONGKONG

By John Luff

In spite of all that has been done in the way of building schools, granting loans, and training staff, there is still a large number of Hongkong children who are unable to find a school. This shortage of schools has provided an opportunity for the speculator, and he has not been idle. The result is that nearly every street in every populous district has its private school, consequently competition is bitter and mean as the market reaches saturation point.

Now the private school has always had its place in the Educational system, with a reason to justify its existence. A generation ago in England there was a snob value. Children, by wearing a distinctive uniform, or by following a different curriculum from that of the various Education Authorities, entered the business or professional world with enhanced prestige. One could almost call it the cult of the old school tie. However, the point I wish to make is, the private school existed because it offered more than the ordinary elementary or secondary school.

In Hongkong the mushroom growth of private schools is due to an entirely different set of circumstances. Rehabilitation which followed World War II took account of the normal increase of the population and budgeted on those figures. Then over-night the population of the Colony doubled

and the demands made upon the Colony's physical resources, including schools, were such that they could not be entertained. Government built schools, existing Grant-in Aid schools extended their premises, but still a large number of children were without schools. Here was a golden opportunity for the speculator and he was not slow to exploit it.

Those first in made quick returns, and they were soon followed by others who saw the situation as a 'Tom Tiddler's ground.' But if we can retain the metaphor of a 'gold rush' the 'strike' has failed. People not remotely connected with education have invested money, hired teachers, and have sat back and drawn dividends from a profession with which they have no academic or ethical ties whatever. As a consequence we have a large wandering body of students drifting from private school to private school trying to obtain what they can never obtain, a good education. Why?

First of all with one or two notable exceptions, good private schools do not exist. A real teacher has just as much a sense of vocation as a doctor or a clergyman and while it would be cant to say that either would object to a good living, there is, nevertheless, that sense of vocation. Without it, a person is just a nuisance in a profession, doing more harm than good. Yet most of these schools are run by people who have only their own financial in-

terests at heart. Such a school can never be successful.

Second; as these schools multiply and competition becomes more keen there is only one way of cutting down expenses, that is by reducing the wages of the teachers. Here there is real tragedy. Many of the Chinese with some academic background who have elected to stay in this Colony are being cruelly exploited by this newcomer educationalist. The teacher is glad to pick up whatever cash he can, and if he were quixotic enough to refuse it, someone more hungry than he would be glad to take it. But I doubt if he can teach on it. It is an axiom that no teacher plagued with economic worries can teach; the reason is obvious. As George Orwell said, it is the most self sacrificial of all professions.

Third; the majority of these schools do not offer a complete education but cater for the interim forms finishing at a stage immediately previous to that where the scholar can test his ability in public examination. From a profit motif point of view, this is a clever thing to do. Very little equipment is required; no elaborate science apparatus which is so costly; no specialist teachers who can demand high salaries. In short it is all take and little give. But what is the consequence? Turned adrift at form IV after studying at one of these establishments, the child is entirely incapable of preparing for an examination. An inferior school does not enforce discipline for fear of losing a fee paying scholar; and there is no discipline of the mind for the simple reason that the school owner, in most cases, is not in a position to impart that quality. The product of such a school is foredoomed to failure.

Fourth; teachers. It must be obvious to everyone that a teacher should be trained, but since the war there has been a world wide shortage of teachers, and Hongkong, for the reasons given above, suffers more on this account than most places. Now government is very definite on the following point: every supervisor of a school is referred to that section of Ordinance which states he is not allowed to employ an unregistered teacher if a registered teacher is available. I should say in the main that that article is followed except in the teaching of English, and for some reason the local population is committed to fallacy that an English speaking person untrained and having no academic background, as a teacher of the English language is superior to a local English speaking trained teacher.

At this year's conference of the N.A.H.T., Miss E. D. Cohen said, speaking of unqualified teachers: "...who are 'nice mothers,' who have time on their hands and like children, so they think they would like to teach. They are being employed as teachers without any qualification at all—not even, in some cases, a grammar school education. It has been

considered necessary to use this device to bolster up a crumbling educational system..."

In my opinion that is too devastating a remark and not altogether justified, but it does give us an idea of what a head teacher feels about authority's lack of foresight. But Miss Cohen was referring to primary schools in England where the children speak English as their mother tongue; what then when people are employed out here to teach English as a foreign language, and who are incapable of giving rhyme or reason for English usage, and are totally ignorant of philology? Nevertheless a large European staff looks good, good window dressing. The disappointments come later.

Last of all one is forced to use the word 'racket'. Ordinance is being evaded; there are many schools operating outside Government cognizance. A balcony is rented, a few desks are assembled, and someone establishes a school; or on the other hand it is a Kindergarten ostensibly recruiting only nine children; and another school is in operation outside Government control and unknown to Inland Revenue. Another undesirable aspect of some of these schools is their employment of individuals who go spying on rival institutions with a view to touting for pupils, adjusting fees, and collecting intelligence that might allow them to outmanoeuvre a rival institution.

In actual fact the private school does not serve that section of the community it should serve which is, that section which could be denoted as fee paying class. For reasons outside the scope of this article, the whole educational system has become inverted. Given equal intelligence, a child from a comfortable home with room to a study will out-pace, during school years, one who has to do his homework under a street lamp-post. Our great voluntary schools, nevertheless, serve too many included in that class of the community able to pay for education.

What Hongkong needs is a number of schools absolutely free where those parents genuinely unable to afford fees could send their children. And by a free school I mean one where the child can, given the ability at least approach the fifth form. Furthermore, charity should not begin in the teacher's pocket, but rather with those who could afford to endow such an institution.

I do not stress this point too strongly; if we are sincere in our expression of Democratic Principles, then only the best should be provided for those future citizens who will serve the next generation. The teacher deals with the mind of the child, surely that in itself should awaken a sense of responsibility. Now if education is to serve the community of Hongkong, and for education I connote not only a little formal knowledge, but those within attributes which we classify under citizenship, then education must be wrested from the avaricious grasp of the exploiter.

FIVE PER CENT INTEREST FOR INVESTORS IN CHINA

At the time when the overall changeover of private industry and commerce was at its height in China, and pressure was acute, many private industrialists and business men "spontaneously" increased their investments. On top of that, they were subjected to another "anti" campaign by the Party activists calling upon them to put still more of their private funds into the enterprises. Such campaigns invariably have the ominous "or else" attached or implied. Those who submitted with more or less good grace to this pressure later complained about it. The result was that a high official of the 8th General Office of the State Council received a reporter of the official news agency on July 20 and elucidated the position. Entrepreneurs who "coughed up" private funds to make increased investments during or after the period of "general conversion" conformed with a "patriotic movement which supports Socialism." But it was going too far to sponsor a campaign afterwards for additional investment, and the CCP Centre issued reprobating directives on three occasions to stop this practice. These directives pointed out that while investments made by the capitalists before the changeover might be accepted as additional investment, all new investments—whether made in cash or in forms of materials or properties—should be refunded, either in cash or in kind.

The same principle was laid down in regard to the smaller capitalists, peddlers and workmen in the provinces. The State Council, in reply to a query from the Kweichow Provincial People's Council, directed that this refund should be carried out automatically, irrespective of whether the recipient is at present in need of the money or not, and no difference is to be made whether the investment is in cash or in materials. But individual industrialists and merchants may "decline to take back the money if they like after full explanations."

The remarkable admission was also made by the official that many capitalists had estimated their property and assets at much too low a figure—"mainly because they wished to show their positiveness." Another possibility is that they were scared that if they put the figure high or even equitably they might spend a tour in prison! The official put it more sweetly when he said that some "had apprehensions and would rather err in making a too low rather than a too high estimate." Workers and employees, as well as the Party and State officials supervising the work "were always afraid that the State might suffer losses and therefore were inclined to be very strict." The State will have to check on the figures and must see to it that it is carried out "truthfully and in a fair and rational manner."

In Canton, during the socialising campaign, many private industrialists and businessmen and their families handed over gold, silver, cash or real properties for extra investments in the joint enterprises. Some of them gave up practically all they had, and had nothing left to ensure their own livelihood. Full refunds have been ordered in these cases also.

The satisfaction of the dispossessed entrepreneurs was not unalloyed over the decision to allow them a "dividend" of 5% per annum for an unstated period that is certain to be much shorter than even the pessimists believe. The Government organs reminded them over and over again how well off they were in being granted such a concession. Some paid more dividends; some paid less, and some paid none at all, and it all averaged out, suggested the official spokesmen, in the investors being better off than ever before. This, of course, showed the Government's "solicitude and concern

for the industrialists and merchants" which they remembered only too well from the "five-anti" days. Certainly they no longer had to borrow money to meet their commitments: they had no commitments nor did anybody have any commitments to them! Undoubtedly it was much better to have this regular 5% than the unevenness or dividend payments before which fluctuated daily! Most of the beneficiaries therefore had understood the significance of fixed dividends, but there are still some who have "incorrect views and unnecessary apprehensions." They have even begun to think that this fixed interest of 5% is almost the same as interest on bank deposits, and to hold that if interest on bank deposits is not regarded as exploitation, fixed dividends also cannot be regarded as exploitation. This view, they are told, is wrong, because it may make them miss the direction of reform. The dividends on private shares will still constitute exploitation. Any dividend obtained by the capitalists from enterprises is that part of the value created by the working class through labour, says the Tientsin Ta Kung Pao, which has been taken over without compensation and is thus by nature exploitation.

Upon noticing the speedy progress of Socialist transformation, some people have become worried as to whether dividends will soon be abolished. And then, how can they earn a living? This worry, they are assured, is unnecessary. Of course, fixed dividends will be abolished in future, but the time for this abolition cannot be set without taking into consideration the livelihood of the capitalists and the degree of their political consciousness. The Socialist revolution is to be completed, but softly and smoothly, and it is a good thing for the bourgeoisie to go through the transition to Socialism. "Socialism means to give everyone a good, happy life. It is not necessary for us to worry about the good, happy future." The dividends will keep them alive while they are reforming and preparing to work their passage thereafter when all the institutions are fully socialised. So it is up to them to develop a habit of labour, acquire working skills, try to achieve the proper ideological (post-Stalin) reform, and make proper preparations to give up this kind of exploitation (receipt of dividends) in future so as to become self-supporting workers.

The refunding of "additional capital investments" which private industrialists and merchants were "induced" to make under the sharp pressures applied at the time of the conversion of their enterprises into joint ownership (or virtual sequestration by the State) is being actively carried out in the leading cities like Peking, Tientsin, Shanghai and Nanking. In accordance with the orders from Peking, the people's councils in various areas co-operated with the chiefs of the industry and commerce sections. Many serious injustices were thus corrected. In some cases the industrialists were persuaded to hand over practically all the negotiable wealth they or their wives possessed. Seven brothers of one family in Shanghai made over nearly 500 ounces of gold. Official propagandists represented them as holding a family conference on the topic, at which "some felt they were well provided for and should not accept the refund." But two of the brothers brought about unanimity of opinion by pointing out that the refund was the policy of the Government and should therefore be accepted. The Chairman of the Shanghai Silk Merchants' Guild even handed over his wife's jewellery as added investments when his enterprises were taken over under joint ownership. He remarked that "the Government now considers it possible that some might have suffered from these additional investments and thus ordered the refund."

UNDERGROUND EXPANSION OF TOKYO

By Ian Dunlop

Tokyo is a city in search of a new dimension. The third largest city in the world after London and New York, Tokyo is now almost literally bursting at the seams. The city's population has passed the 8,000,000 mark and is still rocketing upward at a rate of about 400,000 people every year. The problem is just where to put all these people. Further expansion outwards is almost out of the question. Tokyo already rambles many miles over the plains of Eastern Japan. In the desperate scramble for more space, it has steadily swollen outwards in every direction until neighboring towns and cities that were once quite separate are now indistinguishable from Tokyo itself. Few travellers riding between Tokyo and Yokohama 16 miles away realize as they see the never-ending succession of houses along the way that, at least technically speaking, they have left Tokyo, gone through another city—called Kawasaki—and then entered the city limits of Yokohama. To all appearances, the three cities run into one great metropolitan mass.

The usual answer when a city can no longer expand outwards is to build upwards. But, unfortunately for its overcrowded citizens, Tokyo cannot do this. Because of the danger of earthquakes, which periodically occur in Eastern Japan with devastating results, Tokyo will never be able to have skyscrapers. With the warning of the Great Kanto Earthquake which almost totally destroyed Tokyo and Yokohama in 1923, no building today in Tokyo may be higher than 100 feet. This means that the city's tallest buildings are no more than eight or nine storeys high. Since it can't grow outwards or upwards, Tokyo is taking the only possible course—down underground. If the many different construction plans now being discussed materialize, many of Tokyo's millions may well spend a good proportion of their daily lives, shopping, working and travelling, in brightly-lit concrete warrens below the ground.

Any visitor tough, or foolhardy, enough to spend a single day riding around Tokyo's network of railways, buses and street-cars would at once fully realize just how urgent the need is for more space. It takes a Tokyo subway ride at rush-hour really to appreciate the full meaning of the expression "teeming millions." It is an adventure of endurance and a fight against a million other determined commuters for an inch of room to stand in. At the stations, the crowds are so dense that it sometimes takes ten minutes queueing along the stairs before it is possible even to get onto the platform. As each train draws in, a solid pack of humanity forces its way aboard until it is literally and physically impossible to squeeze another single person in. When the passenger wants to get off, he has to use a grimly determined scrum technique to push his way to the door. With their wry brand of humor, the people of Tokyo describe their jam-packed trains as "standing coffins." But some drily suggest that even coffins have more room to move about in than a city railway carriage at rush-hour. The bare statistics prove their point. According to the latest figures, Tokyo's transport system carries more than 11 million passengers every day. These passengers flood into Tokyo each morning from the suburbs on numerous public and private railway lines. But the congestion really begins where the private lines meet the national railway network which runs in a huge loop circling the city. None of the private companies are allowed to extend their lines into the city center. To reach his downtown office, the commuter has to rely on buses, street-cars or the subway. But

at present there is only one subway line which runs little more than 13 miles.

To meet the inexorable pressure the subway system is being extended and, despite the enormous construction costs involved—a million yen a yard—Tokyo's harried commuters will soon have a second line linking other parts of the city to the downtown area. Another ray of hope for relieving the present congestion has come with the application of five private railway companies to build eight new underground railway systems. The city authorities are now examining their plans.

The tale of congestion doesn't stop with the city's saturated transport system. Tokyo's daily commerce is following the railways underground. The city is only at the threshold of its new underground warren stage of development, but it is already possible to do a complete day's shopping in Tokyo and never come out into the daylight above ground. Strung out along the city's subway line are six spacious shopping centers which have sprung up below ground in the halls and passage-ways of the subway stations. In some cases the subway station merges into the huge basements of department stores. After the battered commuter pushes his way off the train, he can walk straight into an underground barber's shop to get himself spruced up again, wander into a shop next door and get himself fitted up with a new suit or have his trousers pressed while he waits, and in yet another shop buy some flowers for his wife—all this before he has left the precincts of the subway station. At two other places in Tokyo are two big underground shopping centers which are completely independent of the subway system. In the crowded amusement area of Asakusa in the eastern part of Tokyo some enterprising stall keepers, finding they were getting steadily squeezed off the streets, decided the time had come to start burrowing underground. They pooled their resources and built a miniature "town" below ground covering an area of 162,000 square feet. Today, they are enjoying brisk business in their shops and offices which line a brightly-lit and well ventilated "street" which is actually 30- or 40 feet below the real street where they had formerly kept their stalls. The other underground shopping center might be called The Department Store Inside The Hill. It was built at Ueno near the middle of Tokyo. Unable to find any space above ground, the designers burrowed into a steep hill that dominates the Ueno area and built a complete three-storey department store covering more than 38,000 square feet inside the mound. It no longer seems particularly odd to the people who do their shopping there that many feet through the solid earth above their heads hundreds of other people are strolling in the pleasant shade of the cherry trees of Ueno Park. And it occurs to few of the office workers relaxing in the park during their lunch hour that these same cherry trees are driving their roots down towards the roof of a department store.

Tokyo's burrowing process is being carried into every field of activity. It occurred to one imaginative hotel keeper that if the shops could go underground, there was no reason why hotels should not do the same. He found some space available leading off a subway station, right in the heart of the city. After some further burrowing, he constructed a complete hotel entirely underground. And in case the thought of sleeping in a subterranean bedroom,

PETROCHEMICAL INDUSTRY IN JAPAN

I

In accordance with the 1959 demand and supply program for petrochemical products worked out by the Ministry of International Trade and Industry, the production plans of six companies—namely, Mitsubishi Petroleum, Nippon Petrochemical, Maruzen Petroleum, Mitsui Petrochemical, Sumitomo Chemical and Mitsubishi Petrochemical Companies, have been drafted. The remaining projects of other companies have been shelved in order to avoid an excessive investment.

A summary of the overall situation of the petrochemical enterprises may now be in order. Petrochemical industry is largely a postwar rapid development, though it was pioneered in the United States as early as 1920. At present petrochemical products of the United States account for the bulk of the organic chemicals and 25 percent of the total chemical output (55 percent in terms of value). In

drinking in an underground bar and eating in a restaurant where the light of the midday sun can never reach, might sound like an unusual business proposition, the hotel is proving so popular that many other hotel companies are planning to build their own underground establishments. There is, in fact, a great deal to be said for underground hotels in Tokyo. Unlike their more orthodox counterparts above ground, they are mercifully insulated from all the bustle and din of Tokyo's busy streets. They are cool in summer, pleasantly warm in winter, and completely unaffected by all the quirks of the weather. And, of course, they provide an encouraging sense of reassurance for anyone who might be worried about earthquakes.

All this is only the beginning. The Tokyo Government has received applications for the construction of nearly 40 new underground projects. It is too early to be certain how many of these will actually materialize but there is no doubt that within a few years there will be vastly more of Tokyo than meets the eye at ground level. For example, one application has been made to build a giant three-storey parking lot under Hibiya Park close to the Imperial Palace. Another ambitious project would give Tokyo a second glittering Ginza underground. Under this project, a huge shopping and entertainment center will run for nearly half a mile below the heart of the city and will link up with existing underground arcades in the basement of some of the big buildings in the area. The underground Ginza will be lined with offices and shops, and shoppers will be able to drop in for a meal and a moment's relaxation in a subterranean hotel. Like its sister street overhead, it will be brilliantly illuminated with hundreds of elaborate neon lights, but these will shine all through the day as well as at night. There are equally ambitious projects planned for almost every other quarter of Tokyo as well. At the moment, the question of when, or whether, they materialize depends on two things: official approval from the city authorities and money. But as Tokyo's millions urgently jostle for just a little more space, they are wishfully confident that before very long they will really be able to lead a new sort of "double life"—living and sleeping "upstairs" in the Tokyo that is above the ground, and working, shopping and enjoying their relaxation "downstairs" below the busy streets.

the foreseeable future, the industry is expected to cover as much as 50 percent of the total chemical manufactures in that country. Much progress has been made in European countries though lacking in oil resources. As is usually the case with other countries, development of petrochemical industry is most likely to exert a great influence upon the overall industrial as well as chemical set-up. The major factors that have deterred the expansion of such a basic chemical industry in Japan up to the present will be accounted for by the following facts.

Petrochemical industry is seldom well operated if not on a relatively large scale, being essentially different from the pattern of other chemicals. Also, the market for petrochemical end-products such as synthetic fibers and synthetic resins must be developed first of all, while the production requires the expansion of petroleum refining equipment and highly advanced industrialization (i.e. installation of catalytic equipment for making gasoline through cracking kerosene and equipment for improving qualities of heavier-grade gasoline), to an extent that chemical products could be turned out on an economical basis through effective use of by-products of the refining process, such as waste gas. These prerequisites combined to deter the development of petrochemical industry in Japan.

II

The following are the benefits deriving from the industrialization of petrochemical industry in Japan: Firstly, there is every possibility that chemical materials are made available at an international price level, or about 30 percent lower than before. The fact will enable secondary and tertiary chemical industries employing such raw materials to produce commodities at such a reasonable price as to compete with international goods. In other words, the easier procurement of chemical materials promises enormous contribution to the strengthening of competitive power on the world market for both chemical and related industries, and to the enhancement of the industrial structure. Secondly, much hope is held for improvement of Japan's balance of international trade. The current annual import of petrochemicals amounts to some \$13 million, but for several years hence annual import is expected to run into \$52 million. At the same time, it is considered that the progress of petrochemical industry leads to a reduction in import of petrochemicals worth \$40 million annually; it means so much saving in Japan's foreign exchange reserve. On the other hand, there is assurance of sufficient demand for petrochemicals to justify production that is equivalent to some \$38 million in terms of value. In addition, related industries can probably dispense with some of chemical materials (i.e., molasses which is used in the fermentation process) that have depended much upon import which are estimated to be worth \$2 million.

Assuming then that synthetic fibers such as dacron (terylene) and acrylic nitrile series come to be made at home on a fairly big scale and even to be exported, while import of such textile materials as cotton and wool decreases considerably, the inauguration of petrochemical industry would bring about Japan's foreign exchange earnings on the one hand, and saving in her foreign currency reserve on the other. Thus, much is expected for improvement of Japan's balance of trade. Even in the United

States where petrochemical is in the most advanced stage, the petroleum used as raw material for petrochemical industry is calculated to represent approximately 1.2 percent of the total consummation and for 20 years hence it would probably be only 1.8 percent. So, even though the time may come when progress should be fair in this line of industry in Japan, the petroleum consumption catering to petrochemical use would in all probability be only 1 percent of the total consumption. The most part of materials employed by petrochemical industry is expected to be gas waste from petroleum refining. At any rate, the petroleum consumption for this industry is negligible in quantity.

III

Closely on the heels of the production plans as set up by the enterprises which have been mentioned, the Ministry of International Trade and Industry last year decided to adopt a promotion policy for petrochemical industry. The policy of the Ministry was aimed at building up a system by which major petrochemicals could be sold at an international price level and giving positive support to the most essential and qualified plans under the system. In line with this policy, six companies were selected.

The promotion measures suggested by the Ministry can be summarized as follows: (1) Loans for equipment funds from the Development Bank of Japan. (2) Establishment of short-term redemption system for equipment funds. (3) Approval of technical induction from abroad. (4) Exemption from corporation tax. (5) Allocation of foreign exchange for import of machinery. (6) Import duty exemptions.

The salient points of the promotion measures compared with other industries are: (1) To the promising enterprises should be given priority and positive support with a view to avoiding excessive investment; (2) Choice should be limited to those undertakings which are highly productive and competitive. (3) To the realizable plans so far as the current equipment is concerned should be extended encouraging support.

IV

The development of petrochemical industry will raise the problem as to what extent it will produce an effect upon its rival industries. It is a delicate and knotty question. A brief survey of the situation facing some of the major allied industries follows:

(1) **Effects upon fermentation industry:** As can be seen by the experiences of the advanced countries such as U.S. and Great Britain, fermentation process for making acetone and butanol whose materials have depended upon imported molasses from the Philippines now seems inevitably to be going out of use, especially with respect to the production cost. Since about one half of fermentation acetone is produced in the production of butanol, the price and production volume of the former must be adjusted to the demand of the latter. Though normal butanol manufactured by fermentation process has more or less different properties and uses than those of secondary butanol, it cannot be affirmed whether they would be able to coexist successfully in the same field. As normal butanol cannot vie with secondary butanol in prices, normal butanol will no more be developed for economical uses. As for alcohol, isopropyl alcohol will very likely be employed as solvent replacing butanol from the fermentation industry, because isopropyl alcohol is expected to be obtained from petroleum at a considerably lower price.

(2) **Effects upon coal-tar industry:** Coal-tar industry will also be forced to enter into competition with the petrochemical industry in the field of aromatic hydrocarbons, such as benzene, toluene and xylene. For this phase of industry, however, the petrochemical industry has only to supply any shortage of aromatics which is presently derived from the coal-tar which is a by-product in the manufacture of iron furnace coke and town gas (coal gas). Putting it the other way, aromatics from coal-tar are gaining an importance as a main source of benzene calling for an increase in production. The reason is that the current refining process of crude oil is not capable of yielding the

PETROCHEMICAL ENTERPRISES SET UP BY SIX COMPANIES

	Plant location	Technical tie-up contracts		Value (\$1,000)	Imported machinery (\$1,000)	Scheduled date of completion	Funds requirements (\$ million)	
		Tie-up companies					Construction	Working
Mitsubishi Petroleum	Kawasaki	Universal Oil Products		276	1,267	In Feb. 1957	Construction	1,260
							Working	242
							Total	1,502
Nippon Petrochemical	Kawasaki	Stone & Webster		374	257	In Oct. 1956	Construction	1,100
							Working	197
							Total	1,297
Maruzen Petroleum	Shimozu	Chemical Projects		37	265	In Sept. 1956	Construction	580
							Working	235
							Total	815
Mitsui Petrochemical	Iwakuni	(1) Universal Oil Products (2) Karl Ziegler		{ 1,200		(The first stage plan) In Oct. 1957	Construction	9,890
							Working	4,080
							Total	13,920
Sumitomo Chemical	Niihama	(1) ICI (2) Stone & Webster for ethylen		{ 1,400	890	(Polyethylene) In Dec. 1957	Construction	3,000
							Working	410
							Total	3,410
Mitsubishi Petrochemical	Yokkaichi	Shell Oil				(The first stage plan) In the latter half of 1958	The first stage plan	6,650
							The second stage plan	4,450
							Total	11,100

desired volume of aromatics and increasing the efficiency in recovery of pure benzene. The various measures for increasing the production of coal-tar products are being considered by the interested circles as noted below. (a) Increased expansion of recovery apparatus and improvement of absorption equipment with a view to recovering as much benzene as possible in coke oven gas. (b) Adoption of a new refining process for preventing the losses from sulfuric acid washing. (c) Installation of continuous fractional distillation especially for making pure benzene. By the time these plans are realized, the total output of coal-tar products in 1959 is estimated to increase 25 or 50 percent over 1955, with the amount of funds needed being about Y4,000 million.

(3) Effects upon calcium carbide industry: At the present time petrochemical industry cannot compete with carbide industry. However, there is every possibility of keen competition taking place in future. In other words, it appears certain that new materials for synthetic resins and fibers will increase demand for acetylene and acetic acid which may have to be replaced by petrochemicals, provided that petrochemical industry can supply enough acetylene to be sold at a cheaper price than now. To cope with the impending situation, carbide industrial circles aim at developing the market for their products, coupled with the reduction in production cost through increase in efficiency of electric furnace. Then, the cost of carbide is estimated to be reduced to less than Y20,000 per ton (at present Y25,000 per ton). Still more, rationalization efforts focusing at increased production are being directed toward the

field of calcium cyanamide and into organic synthetic chemicals as well. The rationalization plans under way include (a) improvement of electric furnace and its mechanization for carbide; (b) increased production of polyvinyl alcohol and poval for vinylon and manufacture of acrylic nitrile for organic synthetic chemicals; and (c) granulation of products and expanded installation of storage tank for calcium cyanamide. The amount of funds required for realizing the above rationalization program for 1956 is estimated at about Y7,600 million, loans of which are expected from the Development Bank of Japan.

(4) Effects upon ammonium sulfate industry: The development of petrochemical industry will lead to the further rationalization of ammonium sulfate industry because through utilization of waste gas from petroleum the production cost of ammonium sulfate can be reduced considerably. However, the rationalization methods as just mentioned may vary with the environments where plant is located: they are (a) use of residue gas from petrochemicals, (b) utilization of natural gas or coal gas, (c) complete gasification of coal, and (d) complete gasification of heavy oil and its combination with the established formula, etc. In line with the five-year plan started in 1953, the ammonium sulfate industry is making steady progress in rationalization. Especially for the 1956 schedule, emphasis is placed on the conversion of gas source, i.e. extraction of hydrogen from lower-grade coal, heavy oil and natural gas in place of coke. Thus, the industrialization of petrochemicals induces speedier rationalization of ammonium sulfate industry.

THE CEMENT INDUSTRY OF JAPAN

PART TWO

Demand

Because of the business slump in Japan during 1952 in reflection of the world business recession, the demand for cement in that year, which had expanded at the annual rate of 40-50% till then, increased by merely 7% over 1951. The demand in that year was 7,100,000 tons, almost hitting the ceiling. In 1953, however, thanks to brisk investments and loans of government funds in financing chiefly public construction works and electric power development projects as well as increased private construction works, the demand totalled 9,300,000 tons, an increase of 32% over the preceding year. As can be noted from the operating rate of 92%, which was close to the industry's full capacity, there was a marked stringency of demand and supply. This trend continued into the first half of 1954, but in the latter half, despite the very satisfactory state of exports resulting from improved overseas business conditions, there appeared a fall-off in the domestic demand caused by decreased demand from Government and public agencies due to the slash of appropriations for public enterprises and also by decreased demand from private sources due to the permeation of the Government's deflationary policy. As a result, the rate of increase in 1954 over the preceding year was only 10%, with the total demand amounting to 10,307,000 tons. This trend of decelerated increase continued into 1955, and despite a 50% increase in cement exports during the April-October 1955 period over the corresponding period of the preceding year, the demand as a whole, including the domestic demand, remained at the level of 6,000,000 tons reached in the April-October 1954 period.

Domestic Demand—Domestic demand has accounted for the greater proportion of the demand. For convenience sake, let us consider this question by dividing the demand into the following categories (see Table V): (a) Electric power development projects; (b) General civil engineering works, including harbor, road and bridge construction works; (c) Construction; (d) Secondary cement products; and (e) Others.

(a) Electric Power Development projects

In 1953 electric power development projects finally got under way and the demand from this division was so brisk as to register a two-fold increase over the preceding year. From 1954 onward there was hardly any increase in the demand owing in part to the decrease in Government investments and loans, the demand from this division accounting for about 1,100,000 tons a year, roughly 11% of the total demand. However, electric power development is expected to be continued in the future in step with the expansion of the Japanese economy, and an annual demand of 900,000-1,000,000 tons can be expected for some time to come, according to the recent plan of the Government.

(b) Civil Engineering Works, including Harbor, Road and Bridge Construction Works

The demand from this division has accounted for about 25% of the total demand. In 1953 there was such a brisk demand from public enterprises that the total demand amounted to 2,248,000 tons, showing substantial increases of 51% for harbor construction works, 76% for road and bridge construction works and 27% for general civil engineering works. In 1954, owing to a large carryover of public enterprise disbursements from the 1953 fiscal year and to the urgent prosecution of rehabilitation projects for the heavy damage sustained in the preceding year, the total demand increased by 30% to 2,855,000 tons over the preceding year. Though the demand by harbor construction works was 15% less than that of the preceding year, the demand by road and bridge construction works increased by 37% and that by general civil engineering works by 30%. Affected by the delay in the finalization of the new fiscal year budget and by the impact of the retrenchment budget, the demand during the April-October 1955 period was still 1,388,000 tons, at the rate of which the annual demand for 1955 is estimated at only about 2,360,000 tons.

Then, what is the future prospect of demand from this division? There is an indication among Government circles

TABLE V
SALES OF CEMENT IN JAPAN, BY SOURCES OF DEMAND

Source of demand	1953			1954			Fiscal Year*			1955 (April through October)		
	Volume (1,000 metric tons)	Percentage of com- position	Percentage against the preced- ing year	Volume (1,000 metric tons)	Percentage of com- position	Percentage against the preced- ing year	Volume (1,000 metric tons)	Percentage of com- position	Percentage against the preced- ing year	Volume (1,000 metric tons)	Percentage of com- position	Percentage against the correspond- ing period of the preceding year
U.S. Security Forces	14	0.2	93	27	0.2	193	11	19	0.2	55		
Railways	221	2.4	126	202	2.0	91	111	189	1.7	102		
Electric power	1,096	11.7	199	1,071	10.4	98	788	1,339	12.4	113		
Ports and harbors	211	2.2	151	178	1.7	85	93	158	1.4	77		
Roads and bridges	440	4.7	176	604	5.9	137	291	495	4.6	83		
Civil engineering works ..	1,597	17.0	127	2,072	20.1	130	1,004	1,707	16.5	79		
Construction	2,120	22.6	130	2,215	21.5	104	1,258	2,139	19.8	88		
Mining	140	1.5	83	99	0.9	71	51	87	0.8	72		
Finished products	614	6.6	141	719	7.0	117	440	747	7.0	101		
Owner use	106	1.1	132	90	0.9	85	72	122	1.1	126		
Others	1,994	21.3	125	2,130	20.7	107	1,337	2,273	21.0	105		
Total domestic demand ..	8,553	91.3	135	9,408	91.3	110	5,456	9,275	86.5	94		
Exports	816	8.7	103	900	8.7	110	860	1,462	13.5	148		
Grand total	9,369	100.0	132	10,307	100.0	110	6,316	10,737	100.0	99		

* April 1 of each year through March 31 of the following year.

Source: Data compiled by the Cement Association.

that they wish to whittle down public works expense. On the other hand, with respect to the construction of roads requiring a high percentage of consumption of cement, there are plans for the maintenance of roads with gasoline tax and for the construction of a country-wide network of roads. On top of this, the Aichi irrigation project with the dual objectives of irrigation and electric power development is expected to be started about next year, and also there is a very active potential demand from the civil engineering division, including a strong request for the improvement of facilities of mining and manufacturing districts and the possible implementation of the Hokkaido development project, and it is conceivable that these plans will gradually turn into a reality. For the time being, however, the annual demand will be about 3,000,000 tons because of the problems existing in the source of funds used by the Government and public agencies.

(c) Construction

The construction division has accounted for about 20% of the total demand for cement. In 1953 the demand amounted to 2,120,000 tons, an increase of 30% over 1952, which large increase is believed to have been brought about by increased popular acceptance of noninflammable buildings, besides the effects of an investment boom. From Table VI showing the ratios of wooden buildings to non-inflammable buildings in terms of floor space started for construction, it is noted that the ratio of noninflammable buildings increased from 11% in 1952 to 15% in 1953. Since the turn of 1954 the demand for cement registered a slight increase (in the building space shown in Table VI, the total for 1954 decreased by about 10% from the preceding year, which decrease was due to the fact that the figures in these statistics did not contain those for buildings rehabilitated from damage, except collapsed buildings). Meanwhile, the demand during the April-October 1955 period was 12% less than that of the corresponding period a year ago.

their economical advantages have come gradually to win public recognition. The demand has been expanding from 614,000 tons in 1953 to 719,000 tons in 1954 and 440,000 tons in the April-October 1955 period (747,000 tons on an annual basis). The greater part of the demand, however, has come from the so-called civil engineering and construction divisions, and generally speaking, the demand will follow the same trend as the civil engineering division or the construction division. However, it is conceivable that the cement industry will develop new fields of demand for secondary cement products with a greater diversity of products along with their future popularization. In this case it is likely that the dependency rate of secondary products on the so-called civil engineering and construction divisions will decline gradually.

It is reported that it is not necessarily difficult to anticipate an annual increase in the vicinity of 100,000 tons of cement for the manufacture of secondary cement products.

(e) Others

These represent small-lot demands accounting for about 20% of the total demand and playing quite an important role. As roughly stated in the section dealing with secondary products, it may be safely said that, generally speaking, this division will follow the same course as the civil engineering and construction divisions. For the time being, the demand from this division will perhaps increase by a slight degree.

In the foregoing, we have depicted an overall picture of the changes and prospects of the demand, by divisions. To sum up, the total demand expected for the time being will be 9,700,000 to 10,000,000 tons, consisting of (a) 900,000 to 1,000,000 tons from the electric power division, (b) about 3,000,000 tons from the civil engineering division, including harbor, road and bridge construction works, (c) about 2,500,000 tons from the construction division, (d)

TABLE VI
FLOOR SPACE OF BUILDING STARTED FOR CONSTRUCTION IN JAPAN

Fiscal year	Total floor space		Sources of demands				Structures			
	Government and public agencies		Private		Wooden		Noninflammable			
	Space	Percentage	Space	Percentage	Space	Percentage	Space	Percentage	Space	Percentage
1952	10,098	100	1,968	29	8,129	80	9,020	89	1,077	11
1953	10,706	100	2,015	19	8,691	81	9,061	85	1,645	15
1954	9,738	100	2,071	21	7,667	79	8,066	83	1,671	17
1955 (April-July)	3,508	100	568	16	2,940	84	2,891	82	617	18

Note: One "tsubo" approximates 3,305 square meters.

Source: Survey by the Ministry of Construction.

As for the future prospect of demand, the Government entertains the view that for the time being the cement industry may anticipate an annual demand of 2,500,000 tons, based on a 10-year program for filling up the housing shortage estimated at 2,840,000 houses as of April 30, 1955, with due allowance also for a natural increase in non-dwelling houses.

(d) Secondary Cement Products

By secondary cement products we mean ready-mixed concrete, slates, asbestos cement tubes, concrete poles, concrete blocks and pre-stressed concrete, which altogether have accounted for 7% of the total demand. As one of the measures for rationalizing the use of timber from the standpoint of conserving domestic timber resources, an active publicity drive for the use of secondary cement produced, and the demand for them is now on the increase as

about 850,000 tons from the cement products division, (e) 2,000,000 to 2,200,000 tons from other divisions (small-lot demands) and (f) 450,000 tons from the railway, mining and owner-use divisions, which have been excluded from our detailed description. However, there will be some increase year by year. The Ministry of International Trade and Industry estimates the domestic demand in 1960 at 12,800,000 tons.

Next, we shall look into the demand from a different angle by classifying it into (1) demand from the National Government and local public bodies, comprising chiefly public construction works and (2) demand from private sources, which is stimulated by fiscal loans and investments or influenced by general business conditions. Lacking statistical figures, the ratios of demands from the National Government

and local public bodies to private demand cannot be ascertained, but it appears to be the common practice to assume that the ratios were about equal of late. Though it is not appropriate for us to make a detailed classification in the absence of statistical figures, the general trend appears to be as follows:

In view of the present state of public works expenditures, which constitute the major part of the demand from Government and public agencies and which are regulated by the retrenchment budget, a substantial increase in the demand from this course cannot be anticipated for the time being. However, since construction works, such as road construction requiring a large amount of cement, are on an increasing trend and also since a considerable demand for cement can be expected from the national land development projects, a gradual uptrend may be anticipated, though such a sharp rise in the demand as was witnessed in the past cannot be hoped for.

Private demand is stimulated partly by Government investments and loans, but it appears that much expectations cannot be placed on Government investments and loans for the time being because of the retrenchment budget, as stated in the foregoing paragraph. However, in the light of the current situation of the Japanese economy, the need for such loans and investments has not in the least decreased, and as the Government seems to be managing to find some means or other to seek a source of revenues, some private demand therefrom may be expected, though not to the same degree as before.

Let us take up lastly the trend of general business conditions, which is regarded as another factor responsible for the private demand. In this connection, however, it is difficult to make any outright prediction. If a business recession occurs, the private demand will unavoidably slip, but this slip will be covered by Government and public demand to some extent because, on the other hand, public

works under the Government's anti-unemployment measures will get brisk. Of course, the problem remains as to what extent such a slip may be covered.

From a long-range view of demands from the National Government and local public bodies and private demand, it may be expected that the demand will continue to increase along with the economic growth of the country because cement is a basic material.

Exports—The volume of exports is still not more than 10% of the total demand. Because of the blunted increase or saturation of the domestic demand, there is of late a strong cry for the need to expand exports. What has been the cement export record to date? Exports in 1953 amounted to 816,000 tons (3% over 1952) and 900,000 tons in 1954 (10% over 1953). Exports in the April-October 1955 period amounted to 860,000 tons, a gain of 50% over the corresponding period of the preceding year. At this rate the annual volume of exports for 1955 would be 1,400,000 tons. Whereas the ratio of exports to the total demand in both 1953 and 1954 was 8.7%, the export ratio in the April-October 1955 period rose markedly to 13.5%.

What were the causes of such increasing trend of exports in the recent period?

The external cause was the improvement of the overseas markets since the fall of last year. In this connection, there may be mentioned the following three factors:

Firstly, purchases by Southeast Asia with ICA funds and special procurement purchases increased. As cement cannot bear high freight charges because of its low price as compared with its heavy weight, it may be safely said that the overseas markets are limited generally to Southeast Asia, as far as the present situation is concerned. In Southeast Asia purchases with ICA funds or by the Japan Procurement Agency were particularly brisk this year. From the export record for the April-October 1955 period it

is noted that 45% of the total cement exports was accounted for by ICA purchases and special procurements and 55% by ordinary commercial sales, with a pronounced increase over the 17% for ICA purchases and special procurements and over the 83% for ordinary commercial sales in the preceding year. Secondly, there has been business prosperity in the Western European countries. The cement surplus export capacity of West Germany, the United Kingdom, etc., all of which are leading exporters to the Southeast Asian market along with Japan, has markedly decreased of late because of the brisk domestic demand. Thirdly, ocean freight rates have risen owing to the business prosperity in Europe and the United States, and this situation has placed Japan, geographically close to Southeast Asia, in a relatively advantageous position in the export of cement.

We shall now turn to the domestic factors. Stimulated by the severe stringency of demand and supply in 1953, there was active installation of new and additional equipment, but with the decelerated rate of increase in the domestic demand, the demand and supply relationship has been considerably mitigated. Cement manufacturers who, lured by the brisk domestic demand, were not so keen on making exports, have come to evince a keen interest in exports of late. Such export incentive or export efforts on the part of cement manufacturers created by the trend of excessive equipment may be pointed out as a domestic factor for stimulating exports.

Then, to what extent will exports expand in the future? In the first place, we shall examine as the principal conditions the surplus export capacity and export price.

The annual surplus export capacity of the cement industry may be estimated at 2,500,000 to 3,000,000 tons for some time after 1955.

In the past the export price was pointed out as being higher than the international level, but thanks to the price drop brought about by the reduction of cost resulting from rationalization and the effects of deflation since last year, the export price is gradually approaching the international level.

As regards the causes of the comparatively high level of cost, (1) high price of coal, (2) high unit cost of electric power and (3) many hours of trouble with kilns caused by superannuation, leading to unsatisfactory operation, are considered responsible, but with the progress of rationalization, signs of improvement have come to be noted in productivity and in the quantity of materials required per unit of product.

Another point requiring attention with respect to the international competitive power of Japanese cement is ocean freight rates. In case of a rise in ocean freight rates, Japan is, as stated before, in a favorable position as compared with Western European countries, because of her geographical propinquity to Southeast Asia.

Next, the conditions existing in importing countries must be taken into account. In this connection, the growing self-sufficiency and the purchasing power of Southeast Asian countries are factors that must be considered.

First comes the problem of self-sufficiency. India, Korea, Formosa, the Philippines, Pakistan, Thailand, Indonesia and Burma are carrying on domestic cement production and many of them appear to have equipment expansion programs. In view of the universal existence of raw materials and easy technology for cement production, there is a possibility that, even though production cost in the importing countries may be high at first, their products can vie with imported products by taking advantage of freight difference, and it is, therefore, expected that a self-sustaining setup in these countries will be gradually strengthened with the increase in the demand. From a

long-range view, therefore, the overseas market for cement will be narrowed. On the other hand, because of the difficulty of raising equipment capital and because of the shortage of capital accumulation, many countries, such as Korea, Indonesia, Hongkong, Burma, Malaya, Ceylon and New Zealand, have not yet established a self-sufficiency setup and it is, therefore, believed that for the time being the Japanese cement industry will still be able to place expectations on cement exports as development demands in these countries increase.

What is the importing capacity of these Southeast Asian countries? As is well known, the scope of exports from these countries is limited to a few primary products, such as rubber, jute, vegetable oils, tea, raw cotton, rice and tin, and the volume of exports of these products is greatly affected by the economic activity in the United States and the United Kingdom, principal importers of these products. Therefore, because of heavy fluctuations in the prices of their export commodities, these countries have a very unstable export income, so that, generally speaking, they have been suffering from an unfavorable balance of payments in the postwar period. Moreover, because of the lack of economic autonomy in some of these countries due to the control of their production and distribution facilities by foreign capital, it seems that not all their export income can be employed for the development of various industries. Under the circumstances, though basically much cannot be expected in respect to the increase in their purchasing power, there have been of late signs of active extension of economic aid to Asia by the United States, so that the granting of purchasing power from this source may be expected.

Lastly, as the problem now confronting the Japanese cement industry, we shall take up the prospect of purchases under special procurements and those with ICA funds, which have backed the increasing trend of cement exports since last fall. This problem must be looked into from two angles, viz., (1) increase or decrease in special procurements and disbursements of ICA funds in Southeast Asia and (2) concentration of purchases in Japan. As to the volume of special procurements and disbursements of ICA funds, a gradual decrease in defense and foreign assistance appropriations was expected to occur at one time because of the slashed U.S. Government budget and such a tendency was noted from the actual record. As for special procurements, however, the demand from the United States for permanent defense facilities against the Communist bloc does not seem to have retreated yet, and since the turn of 1955 there have been substantial purchases of cement by the Japan Procurement Agency.

As for the United States' foreign aid, despite the trend of decrease in total amount, priority has been given to assisting the development of Asia. Quite recently it is reported that a request has been made for increases in both the appropriations and the actual expenditures for defense and foreign aid in the U.S. Government fiscal budget for 1957. Taken altogether, there seems to be a possibility of a gradual increase in the demand for cement, though a substantial increase may not be anticipated.

On the other hand, if the domestic setup is fixed up gradually, including the reduction of production cost under rationalization, leading to the reduction of FOB price, rectification of higher price over the international level under the impact of the retrenchment budget, favorable effects will appear in due course and will contribute in no small measure to the expansion of exports.

In short, there will be the problem of tempo in connection with an increase in exports generated by the improvement of the overseas situation and the strengthening of the domestic setup, but expectations may be placed to some extent for the present.

Price and Profitability

For about three years after November 1951 the price of cement had been maintained at a level of Y8,800 (Tokyo wholesale price) per ton, but with the Government's request in September 1954 for reduction of the price of cement for public enterprises as a turning point, the price began to dip month by month thereafter until in December 1955 it came down to Y7,500, a fall of Y1,300, or about 15%, during one year and three months.

What factors were responsible for such a sharp fall in cement price? It was generally ascribed to inventory pressure or to over-production. To be sure, it must have been one of the factors, but the inventory cannot be conceived to have exerted such strong pressure as to bring about a price decline of 15% within a little more than one year, because the inventory, though tending to rise gradually, never went beyond a 0.7-month level at the maximum. The principal factors for this drop should rather be found in (1) excessive potential productive capacity due to the new and additional installation of equipment, (2) decrease in the degree of concentration of production in existing big-time manufacturers due to the advance of new manufacturers into the line, (3) shrinkage of regional price difference due to intensified competition and (4) progress of rationalization and decline in the price of fuel coal, which together served to bring the cost down.

As regards the excessive potential productive capacity resulting from the new and additional installation of equipment, it is noted from a comparison of the indices of productive capacity, output and sales for January-August 1955 with the base indices for January-August 1954, the period before the price slip, that productive capacity stood at 120 and both output and sales at 97 of the base period. It can be seen from this that an increase was registered in productive capacity alone. Moreover, because the indices of output and sales are equal, it is hardly possible to regard either overproduction or inventory pressure as a factor responsible for the price slip as far as the outcome is concerned. Despite the increase in productive capacity, output dwindled instead. In view of the fact that the Japanese cement industry is basically attended with the difficulty of curtailment of operations because of the fact that raw materials are easily procurable in this country, that production cost has come down so much as to enable the industry to carry on mass production and that the local nature of cement products makes it difficult to discard superannuated equipment simply because of its superannuation, it seems likely that even if an increase in productive capacity does not bring about an actual increase in production, it will potentially exert the pressure of oversupply.

Decrease in the degree of concentration of production in the existing big-time manufacturers has taken place due to the advance of new comers into this field. This decrease will result in the intensification of competition, which in turn may lead to price-cut competition among the manufacturers.

As for the shrinkage of the regional price differences, there was in the past a price phenomenon of "east high and west low" because of the addition of freight differences extending from Hokkaido to Kyushu, but owing to the stiffening of competition between local products and "west-produced and east-bound" products, the price differences have been gradually narrowed.

Last comes the question of cost reduction created by rationalization and the drop in fuel prices. As stated later, following the acceleration of rationalization, there appeared a saving in raw materials used and in various expenses, with the result that the cost of production has come down. Moreover, it hardly needs mentioning in detail that the fall in fuel prices has done much toward the reduction of the

cost of production. In the results achieved during the last half year or so there seems to have been a cost reduction of about Y200 per ton of cement. There is no denying the fact that this reduction of cost served to weaken the resistance of the manufacturers against the drop of cement price.

What effect had the price drop on the profitability of the Japanese cement industry? In this connection we shall now look into the earnings of the industry during the last few terms.

The fall in the sales price of cement was covered by the improvement of unit requirements and the economy in various expenses, so that the ratio of sales profit (net profit/sales) even showed some rise as follows: Second half, 1953 7.14%, first half, 1954 7.04%, second half, 1954 8.78%.

In the wake of the improvement and expansion of equipment there were an accumulation of capital through earnings and increases in capital and borrowings. As a result of the increase in total capitalization, the turnover of total capitalization (annual sales/total capitalization) dropped as follows: Second half, 1953 1.22 times, first half, 1954 1.15 times, second half, 1954 0.85 times.

In consequence, the ratio of profit on total capitalization and the ratio of profit on paid-up capital declined. However, the ratio of profit on total capitalization was still very high as compared with that of the general manufacturing industries, which was 4.48% in the second half of 1953, 2.78% in the first half of 1954 and 2.48% in the second half of 1954. This fact bespeaks the high ranking of the Japanese cement industry.

However, the fact that the downturn of the ratio of profit on total capitalization, as stated already, has its root in the background of a cut-throat sales competition among manufacturers is worthy of attention.

Conclusion

The operating rate of the Japanese cement industry has declined due to the imbalance between the sharp increase in equipment and the expansion of the demand.

Increase in equipment capacity is expected for the time being because equipment will be expanded from the necessity of effecting a qualitative improvement of equipment, of carrying on the concurrent operation of the cement business by leading manufacturers and of acquiring competitive power.

Although the expansion of the demand has been blunted, a gradual increase in the demand may be anticipated in a somewhat long-range view because the industry has a good potential domestic demand and can also expect development demands from Southeast Asia until a self-sufficiency setup in the various countries there is firmly established. Nevertheless, it is expected that there will be difference in the tempo as between the increase in equipment capacity and the expansion of the demand, and sales competition will become stiff for the time being.

In order to cope with this growing competition, cement manufacturers are at present advancing into the secondary products manufacturing division directly aimed at establishing their own sales network and are making export drive exports.

Besides, it is expected that cement manufacturers will align themselves under groups aimed at the formation of a stabilizing force, though such alignment has not yet taken a concrete shape. There may be no sudden change in the industrial map of cement manufacturers, but it is observed that a gradual change is taking place in the industry. Through these movements the disparity in the standing of cement manufacturers will be gradually widened.

(End)

EDUCATION OF OVERSEAS CHINESE

By Chow Shu-Kai

Wherever there is a sizable Chinese community in a foreign country, it always endeavors to establish a school for the education of its youth. Practically all Chinese schools abroad are guided by the educational policies of the Government of China. What are the principles of the educational philosophy of Free China and how do they differ from the communist ideology? What should be the proper manner of operation on the part of the Chinese schools abroad? The true spirit of Chinese culture for millenniums is expounded by Confucius in the following passage of *The Great Learning*: "The ancients who wished to spread virtue throughout the empire, first ordered well their own states. Wishing to order well their states, they first regulated their families. Wishing to regulate their families, they first cultivated their persons. Wishing to cultivate their persons, they first rectified their hearts. Wishing to rectify their hearts, they first sought to be sincere in their thoughts. Wishing to be sincere in their thoughts, they first extended their knowledge to the utmost. Such extension of knowledge lay in the investigation of things. Things being investigated, their knowledge became complete. Their knowledge being complete, their thoughts were sincere. Their thoughts being sincere, their hearts were rectified. Their hearts being rectified, their persons were cultivated. Their persons being cultivated, their families were regulated. Their families being regulated, their states were rightly governed. Their states being rightly governed, the whole empire was made peaceful."

Guided by Confucian humanism, China's educational theories and practice aim at the attainment of universal peace through the perfection of human personality. According to Confucius, the original nature of man is neither good nor evil; its development is shaped by environment and association. Thus the basic purpose of our education is the cultivation of the ideal man—gentleman. Inspired by virtues of wisdom, kindness and courage, a gentleman commences the perfection of his personality by conducting himself properly. He is expected to be a good father, a good son, a good brother, a good spouse, a good friend, a good ruler, a good citizen of the country and, finally, a good citizen of the world.

With a view to promoting harmonious human relationship, Chinese education attaches greater importance to the teaching of ethics and morality than to the imparting of any specific knowledge. The starting point of such a process is self-control. Confucius said, "My worry is centered on these points: that I did not sufficiently discipline myself in virtue; that having been told what was right, I did not follow that advice; and that knowing where I was wrong, I did not reform myself." Such are the standards of Confucian self-control.

In dealing with men and affairs, Confucius strongly advised against four things: prejudice, arbitrariness, obstinacy and egoism. He considered that the greatest obligation of man was to preserve his integrity without giving undue value to wealth, position or power. Personal honor and sense of shame are of paramount importance which must not yield to any materialistic temptation.

Confucianism recognizes that man is a social animal. The proper sphere of human activity is the human society. To bring about and to maintain harmony and tranquillity among the individuals, certain moral and ethical principles in regulating relationships between men are essential. In

this respect, Confucius said: "One central idea runs through all my thoughts." This idea is kindness. The Chinese character for kindness is *jen*, which is made up of radicals "men" and "two". Thus kindness, or *jen*, etymologically means no more than relationship between man and man. According to Chu Hsi, an eminent Confucian scholar of the Sung Dynasty, kindness in Confucianism is "the virtue of the hearts" and "the principle of all love." Considered from the point of human motives, kindness is pure and true sympathy. It is like the seeds of plants, full of potentiality of life. A kind man will try to ensure that every act is in accordance with reason and the development of his ability to distinguish clearly between right and wrong which is known as rationality. A kind man will try to be orderly and observe the amenities in his social life which is known as courtesy or the observation of the rites. A kind man will try to do his best in the discharge of his social and political duties which is known as loyalty. A kind man will not do to others what he does not want done to himself—this is understanding from which stems tolerance. Indeed, a kind man will not seek life at the expense of society but will rather sacrifice his life to protect the society.

The final objective of Chinese education is the realization of kindness which governs personal conduct, family relation, social exchange, public administration and international intercourse. In short Chinese education aspires to nationals to be good men not only of our own country but also of the family of nations.

The Founder of the Republic of China, Dr. Sun Yat-sen, embodied the above-described Chinese culture and educational heritage in the "Three Peoples' Principles" which are the corner-stones of modern China and also the guiding spirit of present-day Chinese education. The mainspring of Dr. Sun's philosophy is the importance of social morality.

The first of the "Three Peoples' Principles" is the "Principle of Nationalism." Influenced by Confucius, Dr. Sun's nationalism has a different meaning from the ordinary sense of the word. Stemmed from the Confucian theory of Kindness, the basis of Chinese nationhood has never lain in armed acquisition of power but in the unifying influence of Chinese culture. During the time of Confucius, persons of the same state who should act in an un-Chinese way were attacked as barbarians, while persons of non-Chinese territories who should act in a Chinese way were treated as if they were Chinese. Chinese nationalism considers loyalty and tolerance as but two faces of the same shield. One who is loyal to his own country should be tolerant of others who are loyal to their own respective countries. While the object of Chinese nationalism is to secure freedom and equality for China, it also postulates sympathetic understanding for all nations of the world, respect of their national ideals and advocacy of their close collaboration to the end that peace may prevail on earth. Dr. Sun's second principle, the "Principle of Democracy," is also identified with Confucianism. Since the days of Confucius, the basic thought and principles of Chinese political institutions of the various dynasties were all permeated with some germs for the beneficial extension of the rights of the people. As an educator, Confucius advanced the theory that "where education took root, no class distinction would exist." The ultimate goal of Chinese democracy is that political freedom and civic rights should be tempered by sound knowledge

and virtuous personality, discarding the divisive power of religion, geography, family and profession. Sun Yat-sen in his devotion to traditional scholarship and with his penetrating insight, declared that the livelihood of the people is a center of all history. In his "Principle of Peoples' Livelihood," he again adopted the Confucian tenet of economic equality. Confucius said: "Uneven distribution is a greater evil than the scarcity of resources; unrest is a greater evil than poverty." To prevent the creation of great landlords and the acquisition of power through control of resources has been a consistent principle of the Confucian school of thought. Social justice must rule the relationships between property owners, employers, workers, producers and the consumers, so as to insure full production and equitable exchange. These ideals were absorbed and elaborated in Dr. Sun's doctrines.

In Generalissimo Chiang Kai-shek, Confucius and Dr. Sun Yat-sen found a worthy successor. It may be pointed out that when Dr. Sun Yat-sen passed away, certain concluding chapters of his "Three Peoples' Principles" pertaining to education and welfare were unfinished. The void is now filled by President Chiang's "Chapters on National

Fecundity, Social Welfare, Education and Health and Happiness". Like Dr. Sun, the Generalissimo is also influenced by the Confucian philosophy of Kindness, as he remarked: "The concept of 'be kind to people and tolerant of things' and 'treat people as brothers and things as friends' in Chinese philosophy are the highest expressions and essence of the philosophy of love. Love and 'kindness' are really two aspects of the same virtue. In everyday speech the two words are usually used together. That is why when we speak of kindness we also have love. Kindness and love constitute the core of Chinese philosophy."

President Chiang has exhorted our schools not to make the error of putting one-sided emphasis on intellectual and physical education to the negligence of moral and social training. "Without the mellowing influence of moral and social training", he says, "intellectual studies are likely to degenerate into mental gymnastics and prove to be useless to the individual, his family, his country and his society and can never hope to make the least contribution to humanity at large." In his view, a full life must be "an ethical and moral life which consists in the belief in cooperation and mutual help as one's basic personal code on the one hand and in a harmonious living with members of one's family and with fellow members of society on the other." He believes that among other things, civic education should teach the people our traditional ethical concepts such as paternal kindness, filial piety, fraternal affection and mutual respect between fellowmen. It is his opinion that only a strong belief in certain fundamental principles regulating the life of men can give us a stabilizing force contributing to the normal development of the human personality.

The foregoing is a summary of the ideals that guide the education of Chinese nationals at home and abroad. Whether or not the Chinese schools have fulfilled these lofty objectives is another matter. Nevertheless, these are the standards which they are directed to live up to. In contrast to our traditional cultural and educational heritage, communism is solely based on materialism and materialistic dialectics. Its basic concept is ceaseless struggle. Under the so-called principle of "contradiction and unity" and that of "endless negation", the communist world is peopled by automatons devoid of any ethical and moral scruple. In a communist society, there is only indoctrination and no education. Youth are trained in the ways of cruelty and violence, shutting off from all human affection, honor and all appreciation of truth, beauty and goodness.

The Republic of China has treaty relationships with many countries whereby Chinese nationals are permitted to establish and operate their own schools. It is the duty of the Chinese diplomatic or consular establishments stationed in these countries to oversee that the local Chinese schools would observe the fundamental creeds of Chinese education as well as the minimum Chinese curricular standards. Since aggressiveness is absent from Chinese education, the schools established by our nationals abroad aspire to be centers of cultural exchange between their own country and the host nations. Apart from their complying with the local laws and regulations to show their respect for the sovereignty of the respective host countries, these Chinese schools also include the full curricula prescribed for indigenous students so as to enable our youth to learn and absorb local culture. Except for a small number of isolated cases, the Chinese schools abroad are duly registered with the local authorities. The exceptions are those schools in remote localities in the hinterland which can only gather a small number of Chinese pupils under one or two teachers. In fact, schools of this category can only be regarded as tutorial classes for Chinese subjects. As far as possible, the Chinese diplomatic or consular establishments, in cooperation with the communities concerned,

TEA PRODUCTION IN TAIWAN

By Hsien-tsiu Chang

There are 42,500 hectares of tea plantations in Taiwan; 94.7% in the four northern prefectures—Taipei, Taoyuan, Hsinchu and Miaoli. Topographically, 80 percent of the tea plantations are on the hillsides, only 20 percent are on the level land. The soil on most of these hills are strongly acid in reaction, and usually bright red in color. These hillside soils, whereon tea thrives, are not suitable for growing rice or sugarcane. Not even sweet potatoes and peanuts would grow well on them.

Over 90 percent of the tea produced in Taiwan are for export. During 1951-52 annual tea export totalled 6 million U.S. Dollars. In the 8 tea producing prefectures and municipalities, tea plantations occupy 20 percent of the total cultivated land area; and the tea growing farm families make up 19 percent of the total farm families. There are 430 tea factories on the Island, not including the smaller ones which make tea with hand labor.

Before the First World War, the Formosan Oolong enjoyed a good market in the United States. From 1896 to 1918, the export of Oolong from Taiwan averaged 7 to 9 million kg. a year. After the First World War, Oolong was gradually replaced by the Indian, Ceylon and Java black tea on the American market. Since then, Taiwan's tea has lost much of its former markets. In 1949, Taiwan started to make green tea for the African market. The same

always endeavor to cause the proper registration of even this type of schools with the local authorities.

The Chinese schools abroad are under the general supervision of the pertinent authorities of the respective host countries. As a matter of practical necessity, however, the Chinese diplomatic or consular establishments have to participate in certain aspects of the work, especially in countries where Chinese nationals always retain their nationality except through naturalization. The Chinese Government has the duty and right to see that its youth are brought up according to the Chinese way. At this particular juncture, the Chinese Government must do everything possible to prevent the infiltration of communism into the Chinese schools. The Chinese diplomatic and consular establishments are acquainted with and equipped for this task. They are rendering services for their own Government as well as for the host nations. Their efforts in this direction do not imply the infringement of local sovereignty but rather a limited share in a common enterprise. To exercise an effective control of the Chinese schools abroad, the close collaboration between the Chinese diplomatic or consular establishments and the local authorities is indispensable.

It may be appropriate to quote the relevant part of the manifesto of the Conference of Overseas Chinese Educational and Cultural Workers held in September, 1955: "Based on the central idea of the 'Three Peoples' Principles,' the education of overseas Chinese should cultivate not only the traditional morality and spirit of our nation but also the habit of respecting the laws and order of the host countries, so that our nationals will live harmoniously with the indigenous population to promote local prosperity and peace. In addition to the preservation of Chinese culture, therefore, the education of Chinese abroad should at the same time train helpful and constructive elements for the respective host countries."

factories, using tea leaves from the same plantations, may produce paochung, black tea or green tea according to seasonal demands.

Like tobacco, appraisal of tea is a matter of personal taste and preference. There is as little ground to say that the Indian black tea is "better" than the Formosan black as to say that the British type of cigarettes is better than the American type of cigarettes. However the palate of the black tea drinkers in most countries has become accustomed to the taste of the Indian type of black tea (including those from Ceylon and Java). The Formosan black tea, which is made from leaves of tea varieties with Chinese origin and has a distinguished flavor of its own, is considered a lower grade. The Formosan green tea, again, is considered lower than those produced on the Mainland. Perhaps because of the warm climate in Taiwan when the local factories started to make green tea in 1949 and 1950, they found it difficult to impart to their product the crystal clear green color and the fragrance of the choice mainland green tea. Remarkable improvement, however, was made during recent years and today, Taiwan's green tea has gained a definite name and place on the North African market.

PROSPECT OF EXPORT

In 1950 when Indian and Ceylon black tea were quoted at US\$0.55 to 0.60 per pound respectively Formosan black was selling at about \$0.35 per pound. At such wide price difference, Taiwan was able to export 4,200 M.T. of black tea in 1950 and 4,800 M.T. in 1951. In 1952, the price of the Indian black tea suddenly dropped to below \$0.35 per pound; and the price offered by foreign buyer for the Formosan black was lowered to \$0.25 or less per pound. Meanwhile the cost of production of tea in Taiwan went up. This can be illustrated by the average cost of production of green tea made by the factories of the Taiwan Tea Corporation (T\$ per kg.):

Year	Raw material*	Labor for processing	Management and others	Packing	Total Production Cost
Crude tea	3.88	0.80	2.96	—	6.64
	5.83	0.20	1.85	—	7.86
	8.06	0.82	2.64	—	10.92
Refined tea	6.80	0.35	0.72	0.23	8.10
	7.65	0.29	0.49	0.87	9.80
	11.50	0.80	1.53	0.71	14.04

* Raw material for crude tea, is fresh tea leaves; for refined tea, crude tea.

Although the production cost of the Government owned Taiwan Tea Corporation may not be totally representative of that of the private factories, the tendency and proportion of increase is unmistakable. From the above table, it is apparent that the sharp increase in cost was due mainly to the steady rise of price of the fresh tea leaves. The cost of production of black tea or the refined green tea in 1952 at T\$ 14.04 per kg., is equivalent to US\$0.41 per lb. This cost far exceeded what buyers had offered: US\$0.25 per kg. Thus the black tea export dwindled to 400 M.T. in 1952.

The price of the green tea was fairly good in 1952. The average price offered by the North African buyers was above US\$ 0.40 a pound. This encouraged factories in Formosa to switch over to the production of green tea in 1952.

Tea Export, 1946-1952
(in metric tons)

Year	Fauchung	Oolong	Black	Green	Miscellaneous	Total
1946	1,115	382	1,929	—	72	3,998
1947	2,208	706	2,325	—	412	5,651
1948	2,965	220	4,003	—	1,408	8,596
1949	2,721	1,070	7,602	1,197	2,121	14,711
1950	772	241	4,207	640	996	6,856
1951	1,432	225	4,786	2,682	1,799	11,134
1952	1,441	73	406	6,150	1,409	9,479

Future prospects, however, are very uncertain. The major green tea market, outside of the producing countries, is in North Africa. That market was largely monopolized by the mainland green tea before the war. Taiwan started to manufacture green tea only in 1949. The price of green tea and the demand for the Formosan green tea is affected by the amount and the price of the green tea exported by the Mainland to North African ports. Tea exporters estimated that an increasing amount of green tea would be exported by the mainland to North Africa this year. Japan has also started a vigorous sales campaign for her green tea in North Africa. Formosan green tea has already felt much stronger competition there this year and the price has dropped. On the other hand prices of black tea recently improved on the world market. The revival of Taiwan black tea, however, is uncertain. The prospect of Taiwan's tea export is therefore not optimistic. If Taiwan's tea industry is to survive, every means must be employed to cut down the production cost and to improve the quality.

COST OF PRODUCTION

The Provincial Department of Agriculture and Forestry (PDAF) carried out two important surveys on tea, both financed by funds from the Joint Commission on Rural Reconstruction (JCRR). One was on the cost of production of the fresh tea leaves, the crude tea and the refined tea; the other on the production capacity of all the tea factories equipped with machineries against supply of fresh tea leaves. In 1952, when the factories were buying fresh tea leaves at \$2.50 per kg, the production cost of the fresh leaves was only \$1.33 per kg. There were not enough fresh tea leaves to meet the demand of all the factories. There were only 337 tea factories in Taiwan before the war, but the number increased to 430 in 1951; and the aggregated demand for crude tea exceeded the supply by some 6 million kg. It takes approximately 4 kg of fresh leaves to make 1 kg of crude tea. In other words, Taiwan needs 24 million kg more of fresh leaves to meet the demand. When Taiwan produced 41.4 million kg of fresh tea leaves in 1952, its factories actually needed 65.6 million kg. To prevent steep increase in cost, members of the Taiwan Tea Guild resolved early in 1952 that the price of the fresh tea leaves was to be maintained at \$1.67 per kg and that no factory should raise the price above that. However the agreement was later broken when each and every factory tried to get more fresh leaves by offering higher prices. The price soon advanced beyond T\$2.50 per kg. Next year a new agreement on price of fresh tea leaves was reached among the members but the agreed price was again exceeded during the year. Apparently, the price of the fresh leaves cannot be successfully controlled by words and agreements. It is controlled by the law of supply and demand. The price of fresh leaves was so high that for private tea makers it made up some 80 percent of the total production cost of the crude tea. However, the farmers were not enjoying prosperity, because the yield of their plantations was so poor. The average yield of fresh tea leaves per hectare, according to the estimate of the Tea Section of the Provincial Department of Agriculture and Forestry in a survey made in the spring of 1952, was only 1,172 kg. Even at T\$2.50 per kg the gross average income per ha. was only

T\$2,960. This average yield is only 1/2 of that of Java, 1/3 of that of India/Ceylon, and 1/4 of that of Japan.

The low yield of the tea plantations in Taiwan is not so much due to the natural limiting factors, as due to the prevailing malpractices in the plantation management. It could and should be significantly raised. The possibility of raising the yield of Taiwan's tea plantations can be illustrated by the improvements made by the Assam tea plantations at Yutze, Nantou. By applying calcium cyanamide at 200 kg per ha. and by the adoption of scientific management methods, the Yutze Station was able to raise its yield of fresh leaves from an average of 1,204 kg in 1949 to 2,380 kg per hectare in 1952. The provincial average in 1952 was only around 1,200 kg per hectare. At 1,200 kg of fresh leaves per ha. and T\$2.5 per kg, the gross income from each ha. was T\$3,000. At Yutze where the average yield was 2,380 kg, the farmers got T\$3,570 per hectare at a reduced price of 1.5 per kg.

CAUSE OF LOW YIELD

The high percentage of missing plants on the tea plantations was caused by the removal of alternate rows of tea on some of the plantations for increasing the production of food crops during the war; the negligence in management of tea plantations toward the later stage of the war; and the failure of rehabilitation during the early postwar years. The poor natural productivity of the soil was aggravated by the application of an extremely low amount of fertilizer and manure by farmers on tea plantations. In postwar years most of the tea growers did not use any fertilizers at all until 1952 when ammonium sulfate was allocated to tea farmers at 100 kg. per hectare. The prevailing cultural practice of deep ploughing in winter and cultivation and weeding 3 to 4 times a year, though quite necessary to the immediate well being of the tea shrubs, are very inducive to soil erosion and harmful to the soil productivity in the long run. The tea shrubs are being seriously over-plucked on most of the tea plantations. The over-plucking not only results in producing tea of poorer quality, but also impairs the vigor and stunts the growth of the tea shrubs, keeping the yield perpetually low. Most tea growers do not prune their shrubs at all. The shrubs, therefore, do not have an even crown. The plucking girls usually pluck not only the flushes at the tips of the branches, but also reach down and pluck the new leaves on the lower parts of the branches. If a smooth and dense crown could be established for the tea shrubs by proper pruning at the end of each year, not only would the shrub flush more profusely and give higher yield of fresh leaves, but also the plucking can be done more efficiently, as the girls can stand erect and pluck off the leaves from the surface of the crown at the height of their waist. Most tea growers do not know how to multiply tea seedlings by layering. Market price of the tea seedlings is expensive. This is one of the reasons why the farmers are slow in filling up the missing plants on their plantations in the postwar years.

JCRR TEA PROGRAM

To fill up the missing plants on tea plantations: Since 1951 JCRR started to assist PDAF to multiply and distribute tea seedlings to needy farmers. A plan was laid out for multiplying a total of 16 million tea seedlings of improved varieties in 3 years. The plan proceeded according to the following schedule:

Year	JCRR project No.	No. of tea seedlings multiplied	Estimated area of tea plantations missing plants to be filled ha.
1951	TW-A-122	3,000,000	1,500
1952	TW-A-236	5,000,000	2,500
1953	TW-A-326	8,000,000	4,000
Total		16,000,000	8,000

The 3 million seedlings multiplied in 1951 were distributed to 3,237 farmers in 63 townships. A sample survey conducted by PDAF in October, 1952, indicated a survival of 84.4 percent of the seedlings after transplanted to the farmers' tea plantations. The 5 million seedlings multiplied in 1952 were distributed to farmers in February and March, 1953. The 8 million multiplied in the spring of 1953 were distributed in 1954. From 8,000 to 10,000 tea shrubs are customarily planted on each hectare. On an average basis of 20 percent missing plants, 2,000 seedlings were allocated to each hectare of tea plantations selected to receive the seedlings. The distribution of a total of 16 million seedlings will eventually fill up the missing plants on 8,000 hectares of tea plantations belonging to poor farmers, roughly equivalent to one-fifth of the total tea acreage and about one-third of the acreage of tea of improved varieties. The better-to-do farmers were encouraged to multiply their own seedlings and fill up the missing plants by their own efforts.

The government owned Taiwan Tea Corporation inherited about 3,700 hectares of tea plantations from the Prewar Japanese Corporations, of which about 2,000 hectares were in pluckable condition, the rest being too far dilapidated to be productive. Even over the 2,000 hectares of better plantations, the missing plants were as numerous as farmers' plantations elsewhere. These plantations are mostly leased by the Corporation to farmers at an average rental of less than twenty percent of the harvest in kind. JCRR subsidized the Corporation for multiplying 1.5 million and 2 million tea seedlings in 1951 and 1952 respectively.

Prior to the Second World War, the Japanese made a great effort to develop the black tea industry in Taiwan. One of the pioneer work they did was to introduce the Indian type of tea varieties to Taiwan. About 800 hectares of Assam tea were planted at the Yutze area of Nantou Prefecture near the Sun-Moon Lake. Due to wartime negligence, most of these plantations were abandoned by the end of the War. In 1949, only 252.5 hectares of the Assam tea plantations were left in full stand. From 1950 to 1952, JCRR gave financial assistance to tenant farmers to rehabilitate the dilapidated Assam tea plantations. The Taiwan Tea Corporation which owns these plantations provided Assam tea seedlings to them free of charge. Wild bushes and weeds were removed, soil plowed up, terraces built, contour and vertical drainage ditches laid out, calcium cyanamide applied, new seedlings planted and old remnant tea shrubs pruned back to shape. By 1952, the acreage of the fullstand Assam tea plantations was built up back to 756 hectares, only slightly short of the prewar acreage. The progress made on these plantations is shown below:

Year	Area of	Area	Annual produc-	Yield of	Annual
	full-stand	under	tion of fresh	fresh leaves	production
	plantation	plucking	kg.	kg.	kg.
1949	252.5	242.9	292,468	1,204	67,192
1950	349.7	242.9	333,667	1,374	76,061
1951	456.0	242.9	515,163	2,122	116,590
1952	756.0	247.6	589,170	2,380	138,067

The project of rehabilitation of Assam tea plantation is a small one, but is a good case in point to indicate the destiny of Taiwan's tea industry. In three year's time, the yield of fresh leaves per hectare of the Assam tea plantations was nearly doubled. Taking the region as a whole, the Assam tea plantations at Yutze is by far the highest yielding area in Taiwan. It can be taken as a good example to illustrate the potential productiveness of the tea plantations elsewhere on the Island if the management methods are improved.

To increase the fertility and organic matter content of the tea soils: As tea is known to be adaptable to acid soil and the optimum soil acidity for tea growth is known to lie

between pH 5 and 5.5, alkaline fertilizers are not recommended for tea. However, since the red earth in Taiwan is so acid that its pH is usually less than 5, application of calcium cyanamide would tend to moderately neutralize the soil and bring its acidity closer to the range optimum for tea growth. The neutralization of soil acidity would also help to liberate more P2O5 and K2O for the absorption by the tea plants. These beneficial effects of the Calcium cyanamide to tea under the condition of Taiwan seems to have been borne out by the results of both the prewar experimentation and the postwar fertilizer demonstrations. The result of a 5-year fertilizer experiment (1928-1933) at Pinching Tea Experiment Station in pre-war time showed that, when applied at the same level of nitrogen, calcium cyanamide was more effective in increasing the yield of tea than other three kinds of nitrogenous fertilizers; i.e., ammonium sulfate, sodium nitrate and urea. Calcium cyanamide also proved to be a better fertilizer for tea than ammonium sulfate in field demonstrations sponsored by JCRR in 1951. By the application of calcium cyanamide at a rate of 450 kg per hectare, the yield per hectare of the fresh leaves on 25 demonstration plots at different places increased by an average of 25.3 per cent in the first year.

Green manure crops are especially important to the tea plantations for replenishing soil nutrient. Little compost manure is used on tea plantations in Taiwan because of the lack of material to compost with and the labor involved in carrying the manure up the hills. Prewar experiments showed that Lupine was the best adapted green manure for the tea plantations. JCRR started to assist PDAF in extension of Lupine in 1950 by providing funds for purchasing seed. In 1949, there were about 800 hectares of Lupine on tea plantations. By 1952, PDAF supplied Lupine seeds to a total of 3,624 hectares of Lupine. The total acreage of Lupine in 1952 reached 5,000 hectares. The acreage of Lupine should be increased to 13,000 hectares.

Although Lupine is a good green manure crop for tea, it failed to grow well on hill-side plantations. The narrow terraces on steep slopes make both the planting and the turn-under of Lupine difficult. Even on level land, the growing season of Lupine is from September/October to February/March, leaving blank a long stretch of the year during which the soil is exposed to rain and summer heat. Experiments were started in 1952 by the Taiwan Agricultural Research Institute and the Yutze Tea Research Institute on the adaptation of the Korean and other foreign seeds to the local conditions. The aim of the experiment is twofold; firstly, to find another adaptable green manure crop to fill in between the tea rows during summer and fall and, secondly, to find a low and dense growing soil cover crop for the hill-side plantations. White Lupine is found to be growing more vigorously than the common yellow Lupine in the experimental plots at Taipei. It may be used to replace the yellow Lupine in some areas in the future.

To reduce the soil erosion on tea plantations: The weakest point in the tea program is the lack of practical and feasible methods to prevent soil erosion on the hill-side. The standard practice in Taiwan is to deep plow the soil between the tea rows and around the tea bushes in the winter and to cultivate and weed four times a year. These practices are claimed by the tea farmers and most of the tea extension people to be necessary for the immediate well being of the tea plants. It is thought that after the soil is packed by the natural seedling and stamping of pluckers throughout the year, it should be loosened in the winter; and that weeds should be removed. Such practices, on the other hand, are inducive to soil erosion and harmful to the tea plantations in the long run. Weeding on

tea plantations is a serious problem. Even on modern tea estates in India and Ceylon, weeding is still a controversy between actual necessity and liability to soil erosion. After experimenting unsuccessfully with weed killing chemicals and taking all factors into consideration, Mr. G. B. Portsmouth, the Acting Director of Tea Research Institute of Ceylon, advised the Ceylon tea growers in 1951 that "the best cover for tea is tea", and urged them to do all they can to increase the spread of their bushes and so crowd out the weeds, while at the same time protecting their soil from erosion and deterioration. Orthodox soil conservation measures, such as contour terracing, laying out contour drainage ditches, strip cropping, etc., are difficult to implement on the tea plantations under the present circumstances, for the local tea farmers are unable to do the surveying work, neither are there technicians in the townships and prefectures qualified to advise them on the soil conservation methods. A soil conservation project was started on tea plantations by the Forestry Division of JCRR in 1953. Under this project, PDAF multiplied a total of 13,025,000 Acacia seedlings for extension on the tea plantations as shading trees. To each hectare of tea plantation, 500 Acacia seedlings were provided. It was hoped that within a few years all of Taiwan's tea plantations would be planted with this leguminous shading tree. Fortunately tea itself was originally an undergrowth of the tropical forest. It can sustain a considerable amount of shading. In Ceylon, planting high or medium shade trees over tea has become a definite part of the green manure policy on tea estates. In Taiwan, leguminous shading trees are used. Since the depth of the surface soil on most of hill-side tea plantations is rather shallow,

there is bound to be some root competition between tea and the shading tree. The latter, therefore, should not be too densely planted. From what can be observed from the tea plantations where Acacia cover has already been established, Acacia should be planted at 500 trees per hectare, in proportion to 8,000 to 10,000 tea plants per hectare.

To improve the cultural methods: The wrong cultural practices prevalent among tea growers can only be corrected gradually by educational and demonstrational methods. A pictorial pamphlet illustrating the common malpractices and the proper way to correct them was prepared jointly by JCRR and PDAF. 10,000 copies were distributed. The contents of the pamphlet were explained in lectures and elaborated by specialists. A large scale demonstration of the improved plantation management methods was started in 1953. 2,283 tea plantations in 82 townships with a total area of 1,750 hectares were scheduled as demonstration centres. The Council for United States Aid (CUSA) donated 300 MT of calcium cyanamide to this project. 200 kg were granted to each hectare of the plantation under demonstration. By the end of 1956 the project will be completed and these widely scattered demonstration centres will become show windows for the proper plantation management methods.

The tea industry in Taiwan has many deep-rooted economical problems. The future of Taiwan's tea industry however depends mainly upon the ability to reduce the price of fresh tea leaves by increasing the yield per hectare. With a low product cost, the Formosan tea can thrive on the international market.

ECONOMIC SURVEY OF CAMBODIA, LAOS AND VIETNAM

(Compiled by United Nations ECAFE Secretariat)

PART II

VIET-NAM*

Under the Geneva Agreements of 20 July 1954, which brought to an end the war in the Indochinese peninsula, Viet-Nam was partitioned at the 17th parallel. Soon afterwards, in late December 1954, were signed the Paris Agreements, abrogating the former quadrilateral agreements between Cambodia, Laos, Viet-Nam and France.

Thus, with the end of war and the establishment of independence, the Republic of Viet-Nam, geographically known as South Viet-Nam, is turning a new page in history. Problems, new and old, are pressing for solution. Following closely partition came the influx of refugees from North Viet-Nam, which added to the problem of unemployment already existing in urban and rural areas (particularly in the Saigon-Cholon area). New arrangements, as provided for in the Paris Agreements, relate to customs, external trade, currency exchange, and monetary institutions. This

calls for rearrangement of the existing financial and business structure. Finally, there is the major problem of rehabilitating and developing the war-torn economy, deprived for the time being of its former industrial basis in the north.

During the latter part of 1954 and beginning of 1955, 820,000 refugees, including 660,000 civilian and 160,000 military personnel and their families, arrived in South Viet-Nam. Each person received a sum of Pr 700 in cash and was first given shelter in a school or other public building. The government had by September 1955 resettled 537,000 persons among 202 centres in different parts of the country.

Resettlement meant an average expenditure of Pr 8,000 per family of 5 persons by the government to build a house in a new community of from 2,000 to 20,000 people, in addition to the building material, also provided by the government. Also, funds are needed to finance purchases of chemical fertilizers, farming implements and draught animals for most of the refugees—those settled, primarily because of comparative accessibility, in the southern part of the country where land is often unproductive and calls for considerable capital investment. On the other hand, the southern mountainous country has fertile soil capable of providing a livelihood to about one million people. As rice cultivation is often not possible, sweet potatoes are planted to meet the immediate food needs of the settlers. New

* This chapter deals with the year's economic development in South Viet-Nam, the post-partition (from July 1954) territory up to the 17th parallel, which now constitutes the Republic of Viet-Nam. In pre-partition statistical sources, Viet-Nam meant North, Central and South Viet-Nam (respectively the former Tonkin, Annam and Cochinchina), whereas South Viet-Nam meant Cochinchina only. In some cases it is not possible to be certain whether post-partition figures officially supplied refer to Viet-Nam as a whole or to the territory under the jurisdiction of the Republic of Viet-Nam.

lands will be reclaimed later for tea culture (Blaoc and Pleiku areas), as well as for lumbering which provides a good source of income (Banmethut and Dalat areas). The fishing and artisan centres, scattered in the southern and central parts of the country, can, given initial help, prosper adequately by themselves.

For financing refugee settlement, the United States Government is providing Pr 1,452 million and the French Government Pr 251 million, thus helping to reduce the pressure on the government's budgetary and payments position.

In 1954 the government announced a two-year development plan for industry and a three-year development plan for agriculture. Implementation has only just begun. A team of experts from the United Nations Technical Assistance Administration was invited to review these plans and is currently in the country.

The agricultural plan aims at reviving the production of rice, vegetables and fruits in particular, increasing the production of rubber by a replanting programme, and using the surplus labour made available by the influx of refugees.

The objectives of the industrial plan are to reconstruct the industry destroyed by the wars between 1940 and 1954; to support programmes for increasing the production of goods which will reduce import requirements; to stimulate industries requiring light equipment and having a high labour content; and to emphasize a programme for the production of electric power.

Aside from the dislocation of the country's economy arising from the 15 years of war, the chief difficulties encountered by the Republic of Viet-Nam in its effort to implement the foregoing plans have been lack of finance and trained personnel, especially managers and entrepreneurs. Domestic capital, heretofore mainly invested in commercial enterprises, has to be re-channelled into development: it is also insufficient in quantity to finance the reconstruction of the country. The government has, however, announced a policy of promoting industrial and commercial enterprises that will contribute towards raising the economic potential of the nation. The National Investment Fund was created in January 1955 with the purpose of helping industrial enterprises by subsidies, loans and advances. In August the government took preliminary measures to finance it with Pr 200 million. Also, the Agricultural Credit Institute was created on 25 April 1955 to finance the cultivation of land abandoned during the war.

External aid, notably from the United States (about \$300 million for budget support, refugee relief, demobilization and economic development for the fiscal year 1954/55), can constitute a decisive factor for economic rehabilitation and development.[†] A substantial part of it is needed in the form of imports of equipment and material for public works construction, fertilizers for agriculture, etc. The portion of US aid for commercial procurement of merchandise, at prices that are competitive on world markets, has not been promptly utilized because of delays in procurement, and of the policy of the commercial banks in requiring one hundred per cent deposit for all import transactions. This credit policy is a particular handicap to the Vietnamese commercial concerns which have far less liquid capital than their foreign competitors. Purchase of French merchandise is facilitated by the "triangular franc" arrangement, under which the United States sells agricultural surplus products to France which in turn pays French francs to South Viet-Nam (already Fr 11,000 million by August 1955).

[†] US aid for the calendar year 1955 is estimated by the US Government to include (in millions of dollars) the following: budget support 203, demobilization allowance 20, refugee relief 41 and direct economic aid 10 (for offshore purchase only, but excluding 37 from counterpart fund).

French aid in 1955 will amount to about Pr 315 million of which Pr 64 million will be allocated to economic aid.

While there are many unskilled labourers who are either unemployed or partially employed, skilled workers as well as technical and administrative personnel are lacking for the implementation of rehabilitation and development programmes. The need to send people for training abroad is fully realized but there still remains the problem that the officials best suited for such training cannot usually be spared from their present work.

PRODUCTION

Agriculture, fishery and forestry: The economy of South Viet-Nam is agricultural and is based primarily on the production of rice and rubber. Forestry and fishing products also are important in the economic life of the country.

In the southern part of South Viet-Nam, a total area of 2.2 million hectares was under cultivation during 1953-40 producing annually a total of 3.1 million tons of paddy. In 1954 paddy production reached 2.56 million tons from a cultivated area of 2.14 million hectares, with however a lower yield per hectare than in 1953. The 1955 crop is estimated to fall to 2 million tons, in view of the late rains and the state of insecurity which still prevails in a part of the rice-growing regions.

In 1954 rubber production from estates of more than 500 hectares totalled 51,086 tons, an increase of 968 tons over the previous year, while the area exploited was 59,500 hectares, slightly more than in 1953. Production in the first eight months of 1955 was 29,351 tons, mainly for export. Domestic consumption of rubber is estimated on the average at 1,000 tons a year.

In 1954, 41,448 tons of maize and 17,206 tons of copra were produced in Viet-Nam.

The production of other agricultural products, such as tea, sugar, tobacco, cotton and pepper, is being expanded, although as yet no sizeable increases can be reported.

The production and export of forest products make an important contribution to the economy. Production of wood for manufacturing and fuel rose from 695,000 cubic metres in 1953 to 796,000 cubic metres in 1954, while production of charcoal rose from 10,547 tons to 14,210 tons during the same period. Further rise in both is expected in 1955.

Fishery production is estimated to have fallen to 150,000 tons per year recently, of which 30,000 tons are estimated to have been consumed in the Saigon area. The full potentialities of fishing have not yet been fully explored. Sea fishing is hampered by the small types of boat used and by the dangers from monsoons during six months of the year.

In 1955 the government introduced several amendments to the Land Reform Act passed in 1953. An important amendment fixed crop rent for use of the land (including building, fruit trees and fish ponds) at not less than 15 or not more than 25 per cent of the value of the principal crop. If the landowner provides the cultivator with seeds and fertilizers he is to be repaid after the harvest at their purchase price plus interest not exceeding 12 per cent per annum. When the landowner lets draught animals or farming implements to the cultivator, their rent shall not exceed 12 per cent of the value of the animals or implements.

In South Viet-Nam much of the land lay fallow during the war years, and capital is needed for its reclamation. There are two institutions in South Viet-Nam which provide credit for this purpose—the National Service for Agricul-

tural Credit and Handicraft Co-operatives, and the Agricultural Credit Institute. The National Service, through banks or co-operative societies, make short- and medium-term loans to cultivators for the purpose of increasing production or acquiring land, but did not function in 1955. The Agricultural Credit Institute makes loans to tenant cultivators and small landowners. Short-term loans, at 12 per cent interest per annum, are repayable after the first harvest, while medium-term loans for the installation of cultivators and purchase of draught animals, at 6 per cent interest per annum, are repayable in four instalments after the second, third, fourth, and fifth harvests. In 1955 the Agricultural Credit Institute was allocated a sum of Pr 225 million by the government.

Industry and transport: Since major industries like coal, power, cement and textiles are concentrated in North Viet-Nam, South-Viet-Nam has begun a programme of industrial development. This programme, however, is handicapped by lack of fuel and electric power, and shortage of trained personnel especially entrepreneurs and skilled labourers.

Power production at the 29 stations in South Viet-Nam, 180 million kWh in 1954, is reported to have been maintained in 1955.

Salt production rose from 24,549 tons during the last six months of 1954 to 35,997 tons during the first six months of 1955. There has also been an increase in the production of sugar, though output of other products, such as matches, alcohol, soft drinks, beer and a few chemicals (oxygen, acetylene and carbolic acid) has remained at the 1954 level.

Construction activity in the Saigon-Cholon area declined during the first half of 1955, as compared with an increase of 11 per cent in 1954. The housing shortage remains acute, especially in view of the large influx of refugees from North Viet-Nam.

Transport suffered heavily from the war. The first task of transport rehabilitation is to reconstruct the railways, roads and inland waterways. The budget of the National Railway Company contemplates improving the existing system and reconstructing the line between Tourane and Ninh-Hoa, a distance of 489 kilometres, at a cost of Pr 590 million, of which Pr 260 million was expected to be spent in 1955. By March the 27-km section between Ninh-Hoa and Van-Gia had been reconstructed.

1,112 kilometres of the main roads destroyed during the war were reconstructed for which budget allocations up to 1955 reached Pr 150 million, with another Pr 298 million for the maintenance of the other 11,000 kilometres of roads in the country.

The extent of the destruction of inland waterway equipment that has taken place may be illustrated by the fact that the tonnage of dumb vessels (country boats and barges) is now only about one-third of what it was in 1945 (at present 100,000 tons) whilst the fleet of self-propelled vessels and tugs has been reduced to less than half (at present 10,970 tons). Measures to rehabilitate the fleet are being considered. The navigable waterways have suffered heavily from lack of dredging, and of maintenance of bank protection and other works including navigation marks. In 1955, a dredging programme was initiated with three suction dredgers made available through US aid. In addition to funds made available by the government, an amount of Pr 16 million was allocated from US aid for the purpose. According to the present programme about 30 million cubic metres would be dredged in 1955 and 1956 to improve navigable waterways and create valuable agricultural plots well above the high water level. It was expected that the majori-

ty of navigation marks would be re-installed and repaired during 1955.

By 1954 the monthly tonnage of goods cleared through the Port of Saigon had reached the record level of 248,000 tons, which surpassed the monthly average of 238,000 tons in 1939. During the first seven months of 1955 the monthly average was only 212,000 tons. For 1955 a sum of Pr 9 million was allocated for the improvement of port facilities by the government.

Also for 1955 a sum of Pr 42 million was allocated by the government for the maintenance and repair of 14 existing airports, in addition to a sum of Pr 6.5 million from US aid for the improvement of the Tan-Son-Nhut airport at Saigon.

TRADE AND PAYMENTS

There are no balance-of-payments data as yet for the Republic of Viet-Nam. In 1954, the three States of Cambodia, Laos and Viet-Nam had a combined deficit on transactions in invisible items of Pr 10,000 million. It is believed that a major part of this deficit can be attributed to South Viet-Nam. The trade deficit of South Viet-Nam in 1954 was Pr 9,376 million (imports at Pr 11,347 million and exports at Pr 1,971 million), compared with Pr 10,712 million in 1953, a decrease of 12.5 per cent. On the basis of returns for the first half of 1955 this trade deficit was expected to show a decline, owing mainly to a rise in the value of exports.

The payments deficit is being met largely by external aid from the United States. The foreign-exchange holdings of the National Bank of Viet-Nam increased from Pr 1,053 million at the beginning of 1955 to Pr 3,678 million six months later.

External trade: In 1954 as in 1953, the value of imports was covered to the extent of only 17 per cent by the value of exports.

Rubber and rice accounted for 81 per cent of the total value of exports in 1954 (79 per cent in 1953), with rubber as the leading export. In 1954, rubber exports reached 54,342 tons (59,548 tons in 1953) valued at Pr 824 million. Sixty-one per cent of this tonnage went to the United States as compared with 44 per cent in the previous year. France's share declined from 45 per cent in 1953 to 28 per cent in 1954. During the first half of 1955, rubber exports amounted to 28,143 tons, valued at Pr 557 million.

Exports of rice and derived products rose to 174,676 tons in 1954 (against 103,430 tons in 1953), valued at Pr 770 million, though they still constituted only a fraction of 1938 exports of 917,000 tons. Although the tonnage had increased by 70 per cent over 1953, the value had risen by only 63 per cent as a result of the general decline in world prices for rice as well as the increased proportion of broken rice and by-products exported. Rice exports in the first half of 1955 totalled 69,609 tons, valued at Pr 262 million, with France and its overseas territories taking the major share here as in 1954. For 1955, France contracted to buy a minimum of 115,000 tons from South Viet-Nam, to cover both its own needs and those of the overseas territories.

In 1954, the volume of imports was nearly 4 per cent higher than in 1953 but the value was 11 per cent lower. There were increases in imports of some agricultural and food products, such as wheat flour, sugar, fresh vegetables and petrol products, but declines in imports of such products as textiles, metals, tobacco, beverages, fish and canned meat. The proportion of capital goods imports to total imports remained the same in 1954 as in 1953, as well as during the first half of 1955, at 16 per cent of total imports.

There has been a significant change in the direction of trade of south Viet-Nam in recent years. While France and overseas territories remain the major trading partners, their share in the total value of exports and imports has declined. In the meantime, the share of the United States has risen rapidly, more so in the value of exports than of imports.

Trade and exchange control, etc.: Imports and exports are subject to licences issued by the Directorate-General of Foreign Trade, the National Commission on Imports, and the Exchange Control Board, of which the first two agencies are expected to be combined soon. Exporters are required to sell their exchange proceeds to the National Bank of Viet-Nam, but are allowed to keep a certain portion for their own use: (1) from the dollar area 3 per cent for free disposal plus another 12 per cent for the import of specific commodities; (2) from the sterling area 10 per cent for imports on a given list of merchandise; and (3) from the franc area 15 per cent for free disposal.

With the abolition of the Customs Union, South Viet-Nam signed bilateral trade agreements with its two neighbours, Cambodia and Laos, on 29 December 1954, relating in particular to transit trade and preferential tariffs. An agreement was also signed with France on 19 March 1955, which fixed the margin of preference of ad valorem duty on French products at a range from 4 per cent (for cement and phosphate) to 15 per cent (for cotton cloth, optical goods). The margin of preference conceded by the French Union to Vietnamese products varies from 2 per cent (for maize) to 60 per cent (for salt). In addition, France reserves a preferential market for Vietnamese rice (115,000 tons) and rubber (35,000 tons). Secondary products of South Viet-Nam like matches also enjoy a favoured market in the overseas territories of France. South Viet-Nam agrees to give priority to certain imports from France—10,000 tons of milk products, 30,000 tons of wheat flour and 30,000 tons of raw and refined sugar, etc. This agreement, valid for one year, is renewable. The tariff rates became effective on 15 April 1955, while the provision regarding the preferential market was made retroactive to 1 January 1955.

On 12 April 1955, South Viet-Nam established two types of customs tariff effective 1 January 1956, namely, the minimum tariff and the general tariff which is twice as high as the minimum tariff. In addition to the United States, countries which have concluded preferential tariff agreements with South Viet-Nam will benefit from the minimum tariff.

Up to the end of 1954, French commercial agreements with other countries generally contained a clause stipulating the participation of Viet-Nam. This stipulation no longer remained in effect after March 1955. In 1953, south Viet-Nam had itself signed commercial agreements with the Federal Republic of Germany, the Netherlands, Italy and the Belgo-Luxembourg Union. In 1955 it held preliminary talks on trade agreements with Japan, the Philippines, Indonesia, the United Kingdom and Australia.

FINANCE AND PRICES

Since 1953, the national budget, including the regional budgets, has had a substantial and increasing deficit. In 1953, total budgetary expenditure was Pr 8,400 million, of which more than 65 per cent was for military expenditure, while revenue receipts amounted to only Pr 5,500 million, the deficit being made up mainly by the contribution from the Government of France for military expenditure.

In 1954, the total budgetary expenditure rose to Pr 18,000 million, of which revenue receipts provided only Pr 5,400 million. The difference was largely financed by foreign

aid, amounting to approximately Pr 9,000 million, with the remainder covered by the Treasury and by the advances from the Institut d'émission.

The national budget for 1955 estimated total receipts and expenditure to balance at Pr 5,122 million. About 93 per cent of the total receipts was expected to come from taxation. On the expenditure side Pr 800 million represented the contribution of the national budget to the military budget, which amounted to Pr 10,605 million, to be financed mainly through US aid, to the extent of Pr 7,819 million, with an estimated deficit of about Pr 2,000 million.

In recent years, about nine-tenths of the country's revenue receipts have been derived from tax revenue. The major taxes, given in order of importance, are the transaction and consumption taxes, customs duties, and taxes on income and wealth, contributing respectively an estimated Pr 2,066 million, Pr 1,692 million and Pr 752 million in 1955. The sales tax has been increased from 1 per cent to 4 per cent. The revenue from taxes on income and wealth has increased from 11 per cent in 1954 to 15 per cent in 1955. Collection of both direct and indirect taxes, formerly undertaken by the regional offices, is now centralized under the Directorate-General of Taxes.

The National Bank of Viet-Nam was established on 31 December 1954. It issues currency, discounts bills, makes loans, buys and sells gold and foreign exchange. It is required in the course of time to build up a gold and foreign exchange reserve equal to one-third of the money supply. Between December 1954 and September 1955 this ratio had increased from 8.9 per cent to 26.0 per cent.

In practice, up to now, the operations of the National Bank have been to issue currency and to buy and sell foreign exchange; it has neither discounted commercial paper nor made loans as yet.

Up to the end of 1954 it was possible for French investors to transfer all profits back to France. In 1954 transfers reached Pr 196,000 million francs for the three States (largely from the former State of Viet-Nam) for which the foreign exchange required was derived mainly from the expenditure incurred by the French expeditionary forces. Under the Paris Agreements, the Republic of Viet-Nam is allocating to repatriation of French capital realized 20 per cent of the amount of piastres purchased by the French Government at the National Bank of Viet-Nam for military expenses. In practice, however, between 1 January and 15 November 1955 the French Government bought only a small quantity of piastres, (less than Pr 2,400 million against about Pr 20,000 million during the corresponding period of 1954).

The wholesale price of No. 1 rice (25% broken) in Saigon-Cholon showed a rise of 54 per cent during the first eight months of 1955 from the level of Pr 323 per 100 kg in January to Pr 500 on 31 August 1955. This rise in price was particularly marked in July and August, mainly as a result of a call for offers from the Army, the small quantity of paddy arriving in Cholon and the hoarding of stocks. The diminution in arrivals was due to the fact that cultivators and traders in the interior anticipated a rise in the price of paddy in view of the long period of drought and its effect on the crop to be harvested in October. Moreover, traders were hoarding stocks and refusing to sell them at what they considered to be an unrealistic controlled price. Arrivals were still poor in early September and commercial stocks were low, but this situation was expected to improve when the early crop was harvested in October.

During the first seven months of 1955 the general wholesale-price index of Saigon-Cholon registered an increase of 6 per cent, with a rise of nearly 18 per cent in the rice and paddy group and a fall of 6 per cent in other food

NATURAL RESOURCES OF CAMBODIA

Cambodia has abundant natural resources. Its subsoil has a promising future although it has not been prospected yet. It shows the existence of rich quarries: of basalt, laterite, gravel, sand, etc., which may be utilised as materials for construction and macadamization. Besides, there are quarries of clay for porcelain, brick and tile manufacture; and quarries of limestone. Several deposits of ores are known in different regions: that of jet at Tuc-Laak (Kampot); that of coridon and zircon (saphirs, ruby, amethyst) in the province of Battambang. As to mines, the country is less rich, though hardly explored yet. At Kompong-Thom are iron-ores which contain 94% of oxide iron, good for the manufacture of special steel. Gold mines exist also in Kompong-Thom. Exploitation has not been organized. Gold mines were also discovered at Stung-Treng

(region of Bokham). Explorations in the province of Kompong-Thom revealed the existence of coal fields.

The subsoil of the country constitutes the natural resources of the future. The present resources consist mainly of wood, timber, and fish. Forests cover nearly 3/4 of the country's surface, that is to say about 136,000 Km². These forests contain an exuberant vegetation comprising a rich variety of timber. In the forests numerous by-products can be obtained; important among them are wood oil (for lighting, caulking of vessels, making of varnish); bamboo for house building, making of rafts, baskets, etc., gamboge and gutta-percha for painting and electric utensils. Well known forest products include such items as cardomom (Kravanh) used in pharmacy, vomit-nut from which strychnine is extracted, lacquer for painting and stick lacquer for making varnish and wax. Cambodian forests offer rich fields for shooting and hunting.

The aquatic fauna constitutes one of the biggest assets of Cambodia. Fishes are abundant in the lakes, rivers and seas of Cambodia. Fishery brings not only a very great variety of fish, fresh, dried, and smoked, but also several by-products such as fish oil for light and as substitute for mazout, fish fertilizer rich in azot, and saumures (Nuoc-Mam) much appreciated in cooking all over Indochina.

Agriculture is most important in Cambodia, because of the fertility of the soil. The country forms a basin limited by two elevated regions: in the north, the range of Dangrek and in the south that of Cardamomes. At the beginning of historic times, it was still a vast maritime gulf which has been filled by a general elevation of soil and by the alluvium contribution from the Mekong river. The fertility comes also from silt deposited every year on the banks and plains of the Mekong and its numerous tributaries. The Mekong fulfills in Cambodia the same mission as the Nile in Egypt.

Agricultural production is varied but the principal is culture of rice, which constitutes the basis of the nation's food. Rice is cultivated everywhere in all provinces, especially in Battambang, Kompong-Cham, Takeo, Prey-Veng. After satisfying the food demand of the people, about 12% of the rice harvest can be exported. After rice comes rubber in importance. The culture of havea is practiced in the red soil of the country. There are ten plantations of havea. Latex from havea is decanted and filtrated and coagulated. This raw rubber is passed through a rolling mill, cut into forms, dried, compressed and packed. After this semi-industrial transformation, Cambodian rubber is exported. Cambodia exports its whole rubber production, amounting to over 30,000 tons per annum, 1/3 of the Indochina production. Next to rubber come corn, pepper and kapok of which Cambodia is an important supplier. Cotton, castor oil, tobacco, haricot, soya beans and other beans and nuts are also exported. Fruits constitute an important resource of the country. They are however all for home consumption.

Although agriculture is prosperous, it remains to be improved in future. A great part of the land is not under cultivation. In cultivated area, lands are divided into numerous small properties, ranging from 3 to 5 hectares on the average, so that the culture cannot yield its best. Moreover, farmers continue to stick to their traditional methods of cultivation. They do not use fertilizer and wait for rain instead of having recourse to irrigation.

Pasturage encounters in Cambodia much difficulty. First of all, Buddhism, the religion of the Cambodians and

CONCLUSION

The economy of South Viet-Nam which is passing through a difficult phase is at present characterized by a low level of production, a large budgetary and payments deficit and a serious unemployment problem. On the other hand, the potential production capacity of the country appears great. With the return of peace, much land can be reclaimed and the pre-war production level restored at the least. The resources that can be developed immediately are agriculture, livestock and fisheries. Three economic centres could be created: the Plain of Ca-Mau with 30,000 hectares of possible rice fields, the Plain of Jones with 500,000 hectares, and the PMS plain which could become an agricultural and industrial centre as important and as rich as the southern part of the Republic, thanks to the presence of hydro-electric power, salt mines and forest lands.

The considerable import surplus in recent years, met by external aid mainly from France and the United States, has made it possible to maintain a degree of monetary stability under highly disturbed conditions. To the extent that aid goods were supplied, the inflationary pressure was mitigated.

Private investments, which remain small, are mainly in the commercial sector where profits are high. Existing capital is owned largely by foreigners, very little by Vietnamese. The newly established National Bank can in time play an effective role in encouraging capital formation. Credit policy can be shaped so as to attract private capital towards productive investment, and a clear-cut policy on foreign investment may reverse the pessimism that foreign enterprises exhibit today.

(END)

MINERALS IN THE PHILIPPINE ECONOMY

By Benjamin M. Gozon

(Director of Mines, Manila)

The promotion and encouragement of the mining industry is one of the objectives of the Bureau of Mines. The Bureau has embarked on an aggressive program that will cover nation-wide exploration, development and mining of mineral resources. The area thus far geologically surveyed covers about 2,900,000 hectares of which 1,500,000 hectares have been developed and mined. Thus of the entire land area of the Philippines' 29,750,000 hectares only 9.72% have been surveyed, 4.86% have been located for mineral development and only .04% have been actually developed and mined.

Our country has enviable mineral assets, perhaps among the richest and varied in the so-called under-developed countries. This is the opinion of geologists and mining engineers who have made studies of our mineral potentialities for many years. This opinion is backed by facts. If you take a map of the Philippines and sticks a pin in every locality where mineral deposits or prospects have been discovered, you will find that the face of that map will be crowded. Each province will be represented with at least 3, generally more, mineral localities.

Gold deposits occur in Baguio, Paracale, Masbate and Surigao districts to mention the principal ones. Copper is found in Lepanto in Mt. Province; in the Botolan area in Zambales; in Toledo, Cebu; in Albay, Batangas, Capiz, Negros Occidental, Samar and Sulu. Some of these gold and copper deposits are centuries old—known long before the Spaniards came to our shores.

We have the biggest refractory chromite deposit in the Far East and one of the biggest in the world in Masinloc, Zambales. Metallurgical chromite also occurs in that province and in Camarines Sur, Oriental Misamis and Palawan.

There are at least eight areas where high grade iron is known, Larap & Paracale, Marinduque, Samar, Bulacan, Davao, Cagayan, Ilocos Norte and Zamboanga. Of the so-called lateritic iron, Surigao alone has over a billion tons—one billion tons of material that is a potential source of both nickel and iron—two very important metals in our everyday life.

In fuel minerals like coal and petroleum, our resources are now under intensive investigation. Practically every major island in the Archipelago has coal. The big deposits are in Cebu, Malangas and Batan. Commercial petroleum is still to be tapped but we do know that oil exists here.

We have numerous other deposits of metals and non-metals, such as manganese, lead and zinc, mercury,

its forbidding the killing of animals, is not favorable for breeding of pigs and poultry destined for consumption. As to horned animals, their breeding is often discouraged by thefts practiced in the frontier regions of Thailand and Vietnam. Moreover Cambodian cattle are under menace of degeneration caused by the abuse of castration for the purpose of utilizing young breeders. Cambodian pasture has a good reputation for quantity and quality of its cattle. Around the forests, the inhabitants have enough pasture grounds for their cattle breeding. The Veterinary Service is improving horses which are vigorous though small. There is a special branch of animal breeding for pachyderms and for elephants for the use of transport.

molybdenum, pyrite cement and ceramic materials and even radio-active minerals, distributed all over the Island.

The ravages and destruction caused by the last war put all the mines in a prostrate condition. Nonetheless, the courage, acumen and faith of the miners were responsible for the immediate reopening of the old mines after the war. Post-war mineral production has been on a decided upward trend as shown by the following figures:

Fiscal Year	Production Grand Total
1946-47	P 13.7 million
1947-48	28.2 "
1948-49	49.2 "
1949-50	69.6 "
1950-51	107.6 "
1951-52	130.6 "
1952-53	147.8 "
1953-54	147.0 "
1954-55	148.6 "

The above figures show an increase of about 950% in 9 years or with an average yearly increase of about 95%.

A preliminary inventory of the mineral reserves of the Philippines made in February, 1954, gives a total of 1-1/3 billion tons distributed as follows:

Gold and Silver	15 million tons
Iron	1.2 billion tons
Copper	22 million tons
Chromium	10 million tons
Manganese	2 million tons
Coal	12 million tons
Other non-metals	47 million tons
Miscellaneous	19 million tons

with an estimated total value of P14 billion. This inventory covers only an area of about 2.9 million hectares or roughly 10% of the total area of the Philippines.

The Bureau of Mines has endeavored to create the best attractive climate for mining investment in the Philippines for both local and foreign investors. With the elimination of foreign exchange controls, with tax exemptions and reductions in certain cases, with subsidy in the case of gold, with parity rights for Americans, with geological and mineralogical surveys and development program in the fields of strategic minerals, mineral fuels and non-ferrous metals, importation of foreign technicians, coupled with the favorable world market price trends and demands, particularly in the use of base metals, it is safe to forecast that our mineral production in 1956 will be increased by 30% to 50%, and by 100% or more in the next two succeeding years.

There are no extractive industries nor metallurgical facilities in the Philippines at present. The Philippines is primarily an exporter of raw minerals and concentrates with the United States and Japan as the only markets. The steel and foundry plants in and around Manila are based upon limited scrap supplies and all foresee the early exhaustion of these supplies. The fact remains that iron ore is exported to Japan anywhere from P17 to P19.00 per ton. At the same time the Philippines import finished steel products reproducible locally at an average price of P400.00 per ton. Where does the difference between P400.00 and P19.00 go? Surely, the benefits in the form of gain in foreign exchange, employment, revenues to the government, more money in circulation, dividends and profits do not

accrue in favor of the Philippines. Comparable net gains may also be demonstrated for other exported ores.

Japan's total annual iron ore requirements for her steel industry are approximately 7 million tons. With her total annual production of only about 1 million tons, Japan has to import 6 million tons every year of which about 1.5 million tons were from the Philippines. At least seven Japanese steel mill missions have arrived in the Philippines to work out the possibility of increasing our export of iron ore to Japan to about 2-3 million tons a year. Notwithstanding this situation, Japan has integrated iron and steel industries which are basic to her industrialization. With an abundant domestic supply of minerals, is it not possible for the Philippines to establish many iron and steel industries as Japan? There are many integrated factors involved in the question. The Philippines has sufficient supply of the necessary raw materials to justify the establishment of integrated iron and steel industries. Our Government has taken the right step in providing for the construction of an integrated iron smelting plant under the NASSCO. This will pave the way and spur the activities leading to the eventual industrialization of our country. I can foresee the time when the Philippines will not only be an exporter of raw materials but a supplier of finished and semi-finished steel and iron products to neighboring countries.

The mining industry during fiscal year 1954-55 contributed to local economy about P148.5 million worth of foreign exchange in the form of exportable minerals and gold bullion. This is an increase from the previous year's P147 million, in spite of lowered production from gold mines and chrome and manganese producers. The direct income of the Government from mining operations went up from the previous year's P6.7 million to P7.4 million. The reason behind this among others are the lower tax rates and the tax exemptions granted to the industry to encourage faster rehabilitation and development and to ameliorate temporary local stumbling blocks.

As of June 1955, the capital investment in the mining industry was about P203.9 million, of which P53.6 million was invested in gold mines, P118.8 million in base metal mines and the remaining P31.4 million in various non-metallic operations.

The number of laborers employed in the mines is estimated to be 25,000 people. With the opening of mining prospects and the expansion of those operating mines, the number will be increased to about 35,000 in 1956 and more in the next succeeding two years. However, the mines by giving employment to those people indirectly is supporting 4 to 5 times as many. The mines also become consumers and distributors of goods, commodities and services.

Statistics show that the mining industry has the highest index of employment among selected non-agricultural industries in the Philippines during the period 1950 to 1954, with manufacturing, transportation and commerce ranking second, third and fourth, and the industry ranks second in average monthly earnings of salaried employees and wage earners during the period 1952-1954.

One copper mine alone has developed a reserve of about 47 million tons. Twelve others are due to report their reserves within this year or the next. With the known reserves of copper, even excluding the prospects that are being explored and developed, it will be safe to say that the Philippines has the biggest copper mines in the Far East.

Speaking of deposits of nickel-bearing laterites, the Government Reservation has an area of about 35,000 hectares including part of Surigao and all the islands north of it. Exploratory development of about 4/5 of Nonoc

Island alone (area 4,300 hectares) shows as of September 15, 1955, an estimated reserve of 28,000,000 dry metric tons with an average nickel content of 1.38% and iron content of 38.9%. The prospects are good in that about 40,000,000 metric tons may ultimately be delineated on this island. This Nonoc reserve roughly has a market value of 2 billion pesos.

The Government has adopted the policy of opening this reservation to exploration, development and processing, thru public bidding, by private companies as independent operators for the Government under such terms and conditions as shall be worked out between the Presidential Committee created for the purpose and the winning bidders. About 100 invitations were sent to both domestic and foreign companies believed to be interested in and qualified for the desired operation. Six have already sent representatives to make on-the-spot investigations of the property. The representatives have thus far indicated that the initial capital investment of each company will vary from \$50,000,000 to \$100,000,000 or more depending upon its program of operation. The Presidential Committee is accelerating all plans to have this project started without unnecessary loss of time. Considering that only about 4,000 hectares have thus far been the object of exploratory development, of the 435,000 hectares of the entire reservation, one can readily deduce the magnitude and importance of this project in relation to our over-all national economy.

In the petroleum field, more than usual interest has been shown since 1954 to the exploration of our petroleum resources. As of last fiscal year 94 declarations of petroleum discoveries and locations have been registered and 41 applications for petroleum exploration, covering a total area of 3.2 million hectares, have been filed. Of these applications, 1.4 million hectares have already been granted. At least five parties have a vigorous exploration program. The companies and the Government are one in the desire to discover petroleum at the earliest possible time. Petroleum statistics show that the expense involved before oil is discovered ranges from \$5 to \$10 million. If and when petroleum is discovered, as we all hope it will, the discovery will lead to a dollar savings of about P124 million a year, which now represents our yearly importation of petroleum products.

Credit is due to Caltex for constructing a refinery with an initial investment of P60,000,000, to Stanvac and Shell for considering the construction of their own refineries even at this time when there is no domestic production of crude oil as yet involving similar amounts of investment or more. Their construction will roughly represent a total investment of P150 million.

Taking the 1953 statistics, the coconut industry ranked as first in point of value of export. Considering that the total mineral production for the fiscal year 1955 is about P149 million and considering further the estimated increase of about 50% in production this calendar year and about 100% in the two succeeding years, it can safely be predicted that in 3 to 5 years, minerals will again be the premier money crop of the Philippines.

A base metal boom is in the making in the Philippines. This is especially true in the case of copper and iron where a 50% increase in production this year is assured. All these circumstances point to the confidence of all concerned in the potentialities and steadiness of the mining industry in the Philippines. The Philippine mining field offers one of the best investments in all the world, and definitely, in the Far East. As long as our Government does not change its policy of attraction to foreign investors, as long as our peace and order, political and economic conditions remain stable as they are we can all be assured that the mining industry will continue onward.

THAILAND'S CULTURAL TRADITIONS AND THE MODERN WORLD

By Phya Anuman Rajadhorn

Prior to the appearance of the Thai as a political unit, Central Thailand in the Menam (Chao Phya) valley was known archaeologically as the Dvaravati Kingdom peopled by a Mon-speaking race. Later on the Khmer, a race linguistically akin to the Mon, overran Dvaravati and established the Khmer Empire. Down south in the Malay Peninsula and contemporaneously with the Khmer was part of the Srivijaya Empire. These three peoples, the Mon of Dvaravati, the Khmer of the Khmer Empire, and the Malays of Srivijaya left important marks of their highly hinduized civilization in what is now Thailand.

Originally the Thai in Thailand of today were an offshoot of the Thai race whose homeland was in historical time in Southern China. Since many hundred years before the Christian Era many of the Thai people, owing to circumstances and vicissitudes, migrated from their old homeland finding their way gradually in a southward direction into Indochina. Some of them settled down in the mountainous district of Chiangsen in the north of Thailand and formed themselves into many small principalities. Parts of these Thais together with other streams of the Thai race migrated further south, mingled and settled down in the alluvial plain of the Menam valley in Central Thailand. They again formed themselves into many small principalities, this time not independently but under the suzerainty of the Khmer Empire with its headquarters in Central Thailand at Lopburi (Lavapuri). In the 13th century of the Christian Era they succeeded in establishing themselves as a unified Thai Kingdom of Sukhothai. A century later arose upon the last remnants of the now declining Khmer Empire in the lower portion of the Menam valley, another Thai Kingdom of Ayuthia (Ayudhya). Its first dynastic kings came from U-thong, a district to the northwest of Bangkok. Eventually these two kingdoms Sukhothai and Ayuthia and later Chiangsen and other parts of Thailand were amalgamated into one unified kingdom of Thailand. Here follows a chronological list of Thailand's archaeological and historical periods.

Pre-Thai Periods

Dvaravati Kingdom	4th to 8th century A.D.
Khmer Empire (Lopburi)	8th to 13th "
Srivijaya Empire	8th to 13th "

Thai Periods

Chiangsen	9th to 16th	"
Sukhothai	13th to 15th	"
U-thong	13th to 15th	"
Ayuthia	14th to 18th	"

The cultures of the three pre-Thai periods were predominantly Indian. Hinduism and Buddhism were both the religion of the Dvaravati, the Khmer and Srivijaya either alternately or concurrently, but during the 4th to the 8th century, the predominant religion in Central Thailand was Buddhism which gave origin to the Dvaravati art. Architectural remains of the Dvaravati period are few and far between so far as they are revealed by archaeological excavations. It cannot therefore be stated definitely what role the Dvaravati architecture played in later Thai art. In contrast to architecture, there are many carved Buddha

images of the Dvaravati period, having the same characteristics as the examples of the Indian Gupta period. These Dvaravati Buddha images may have been one of the many causes which influenced the formation of artistic appreciation of Thai sculptural art.

Central Thailand during the 8th to 13th century was part of the Khmer Empire. The Khmer art was directly influenced by Indian art, but it developed a distinct characteristic of the Khmer race. The Khmer built numerous beautiful and exquisitely carved temples in stone in this area of Central Thailand, and carved Buddha images of the Khmer style are numerous in this part of Thailand. These Khmer temples and Buddha images have to a certain extent influenced the style of architecture and sculpture of the Thai.

As to the Srivijaya, although its art of the period is one of the best artistic expressions among the many arts of the East, its influence on Thai art was negligible.

Now as to the Thai, it is not known for certain what the religion of the Thai was in their homeland before their exodus from their original home into Thailand and before they became the forerunners of the present day Thai. It is almost certain that animism formed part of their early belief and there may perhaps have been some traces of Buddhism through Tibet and China. Once in the Menam valley they came into contact with Hinduism and Buddhism through the Mons and the Khmers. And since the 13th century it may be said that Buddhism of the Southern school has been their faith. It was here through Hinduism and Buddhism, and especially the latter, to which the art, architecture and literature of the Thai owe their birth.

The Thai means of subsistence for generations has always been agriculture. The fertile plains and abundant rains during the tropical southwest monsoon for six months of the year gave the Thai a self-supporting rice harvest and ample time to face life contemplatively. No rush, no noise and other artificialities that confront the modern world. These surroundings formed the peculiar characteristics of the Thai people. Though less energetic in the modern sense of the word, the Thai became contemplative lovers and observers of nature, amiable, generous and mirthful to everyone with whom they came into contact.

When the Thai came within the orbit of Hinduism and Buddhism, it is easy to imagine that the Khmer art in relation to these two great religions was gradually transposed into the spirit of the Thai people, and through their inborn aesthetic sense for art and their racial characteristics, the Thai were able to create their own personality in art, quite distinct from that of the old background. Although the Thai people intermingled freely for centuries with other races in the Peninsula of Indochina they nevertheless maintained their own identity of racial character. In fact if one looks at the various examples of Thai art such as sculpture, painting and architecture, one will be able to see at a glance that Thai art has an artistic expression quite peculiar to the race.

It is now necessary to state briefly each particular Thai art.

ARCHITECTURE: Examples of Thai classical architecture may be found in the various buildings and struc-

tures of the Thai temples commonly called 'Wat' and also of the Royal palace buildings. Both are fundamental in style and may be divided into two principal types. The one is a building rectangular in plan and contains only one large hall. The roof is sloping, superimposed and arranged in more or less than three, but usually three, tiers, while the other type of building is usually confined to the King's palace called 'Prasad' ('storied building' in Sanskrit) somewhat like a Greek cross in plan and composed of a cubic hall with four porches or less projecting on each side. Typical of Thai architectural structures, the Prasad has many roofs superimposed one over the other, surmounted as its finial either by a small Sikkha (called in Thai 'Phra Prang') or by a high pyramidal superstructure with its four sides formed in a concave line culminating in a final spire. In fact the pyramidal superstructure looks like the Thai royal crown. The superstructure with the exception of the Sikkha was constructed with timber, and unique in its kind is the roof with its terra-cotta glazed coloured tiles. Under a tropical sunlight the polychromic roof with its gilded gables and other decorations gives out a beautiful and harmonized artistic effect.

The use of timber as roofing material for Wats and palaces, the use of the coloured terra-cotta glazed tiles for the covering of the roof, the harmonious polychromic effect of the whole building and the universal outline of the Thai architectural structure into a concave pyramidal curve suggest some influence of the Chinese.

The other prevalent Thai architectural structures are the Phra Prang and the Phra Cedi to be found usually within the precincts of the Wat. They are constructed for the purpose of enshrining the relics of the Lord Buddha or some other relics. They are therefore a form of stupa. The Phra Prang is a brick structure in the form of the Sikkha. It is a direct descendant of the Khmer corner tower like the one at Angkor Wat in Cambodia. Contrary to the stupa the Phra Prang is square in plan and this betrays the fact that originally it served Hinduism and not Buddhism. In fact the predominant religion of old Cambodia was Hinduism and only later it became Buddhism. It is to be presumed that the character of art was already fixed by traditional forms, the Phra Prang therefore served in a later time as a Buddhist monument.

As to the Phra Cedi (or Chedi) it is distinctly Thai. Its structure still retains its form of stupa but richer in architectural masses and mouldings and surmounted by a graceful finial-like spire.

SCULPTURE: It may be said that the Thai sculptural work is mainly confined to Buddha images in round relief. Through the Thai artistic abilities and principally owing to the fuller and truly felt spirit of their religion, the Thai have succeeded in creating a Buddha image which portrays in its real essence the Buddhist doctrine. We think that among the various types of the images of Buddha created by other peoples of the East, nothing can compete in spiritual effect with a fine example of the Buddha image of the Sukhothai period. Another general remark about Thai sculpture is that the Thai modelled and cast in bronze with the same ease a very small Buddha figure, as also a colossal one. The technique of bronze casting reached in olden times was perfect. In ornamental decorative sculpture executed either in wood or stucco, the Thai in the Ayuthia period reached real perfection both artistically and technically.

PAINTING: Traditional Thai painting is confined mostly to mural paintings of a temple or a palace. It has a characteristic of its own; so different from those of the Indian and the Chinese which with other cultures form the basis of the cultural life of the various peoples in Indo-

china like the classical Greek and Roman did for the rest of Europe. No definite and satisfactory explanation of the origin of Thai painting has as yet been found, though there are suggestions. The life of Buddha, the Buddhist Jataka tales and episodes from the Ramayana mainly form the subjects of traditional Thai painting. It is a conventionalized art, and is very characteristic because the gesture, dress, ornaments of the characters depicted in the paintings are one and the same as those worn by the characters in the Thai classical theatrical performance. Like in the theatrical performance, so in the paintings it is necessary for one to know the meaning of the subject to appreciate fully the artistic value of the painting. But this is a general remark that one may apply to any other art.

MUSIC AND DRAMA: The Thai classical drama is the Khon and Lakorn. Khon is a mask performance depicting the scenes from the Ramayana, one of the famous Indian Epics. The performers representing characters in the epics wear masks and dress in exactly the same style as in Thai paintings. The design and colours of theatrical dress, crowns and the like are fine and rich, and the whole has a golden warm tonality. Each character may be recognized such as Rama in deep green, Lakshaman in gold, Hanuman in white and Sugriva in red. The principal Gods and Goddesses are likewise in colour and wear different types of crowns and tiaras. The performance is accompanied by music played by a composition of musical instruments called in Thai 'Piphat' which are modelled after those of ancient India.

They are: Oboe playing the melody (Sushira); Drum with one face (Atata); Drum with two skins connected by means of straps (Vitata); Two-faced drum with skins fastened with nails (Ativitata); Gong working the cadence (Ghana).

The acting and dancing are formed by rhythmical movements. Each has a proper meaning and is accompanied by music that emphasizes the mimic action of the actors by different tunes expressing different singing. In some cases it was introduced to alternate with the recitation. Of course the actors with their masks on cannot themselves sing; the part of singing is therefore done for them by a chorus of singers with a leader. There are some points of resemblance in the performance of the Thai Khon with that of the Kathakali, the religious performance of Southern India; the Kathakali probably being the origin of the Thai Khon.

As to the Lakorn, the other Thai classical drama, it is allied to the Khon. Difference between the Khon and the Lakorn is that the Lakorn must be played exclusively by actors and actresses. The players do not wear masks like the Khon, with the exception of giants or other mythological figures for whom masks are necessary. The subject of the play is not drawn from the Ramayana like the Khon, but taken from stories of Kings and giants and other romantic tales specially composed in verse for the purpose. Many of such tales are taken either from some portions of the Mahabharata and from Buddhist Jataka tales, or created through inspiration from the above mentioned stories. The other difference between the Khon and the Lakorn is that the latter requires more graceful action than the former which demands more virility of action. The words of the actors and actresses are sung, but the actors and actresses may speak on suitable occasions during the performance.

SHADOW PLAY: This is another kind of Thai classical performance which is becoming a dying art. It is called in Thai 'Nang Yai' which means 'hides-major', in contrast to the 'Nang Talung' a Thai popular play akin to the Javanese 'Wayang Kulit'. The figures of the characters of the shadow play are designed, drawn, embossed and

painted artistically on large sheets of hides. A large screen of white cloth is set up at night with strong lights thrown on its surface. The figures are shown against the screen and are moved about by men who dance as they move. The story played is exclusively taken from portions of the Ramayana like the Khon. Thai shadow play is a replica of the Khon both in music and acting by the men who dance with the figures. There are of course recitations too, to explain the story of the play projected on or against the screen. It is interesting to note that the Thai shadow play is a static art as well as a dynamic one. It is static because the painting of the figures has the same likeness as that of Thai traditional mural painting. It is dynamic because the men who hold the figures, dance and make gestures to the accompaniment of recitation and music. The origin of the Thai shadow play is no doubt the Chaya Nataka Play of India.

LITERATURE: Thai traditional literature is essentially religious. Most of the literature in olden days were works on Buddhist religion and romantic tales and mythology derived from Buddhism and Hinduism directly or indirectly. Apart from treatises on the religion, arts and science of those days, the old Thai literary works, like in India, were composed in verse. Prose writing was rarely done except as a means for commentaries, etc. The employment of prose in Thai literature is of recent date due to the influence of western literature. Within recent times much of the Kavaya literature together with the romantic didactic tales of India were introduced into Thai literature through English translated versions. This was due to the initiation of King Vajiravudh (Rama VI) who was Thailand's versatile poet-king of modern times. It is interesting to state here that there are three versions of the Ramayana in Thai. They are all written in verse either to be read or sung in the dramatic performance of Khon. All of them have the honour of originating from the royal pens of three Thai Kings. The Thai versions of the Ramayana, called in Thai 'Ramakien' (Ramakirti), agreed in the main with the Valmiki epic, but many exotic episodes were introduced in the Thai versions. Some of them may be traced to Ramayana of Southern India, especially the Tamil version. One of the episodes in the Thai Ramayana is to be found nearly identical with the character of Kakua in the Bengali version of Chandaravati. Other exotic episodes may be compared with the Javanese and Malay versions. We have

one episode in the Thai Ramayana which is worth recording, even in this brief essay, in order to show what adaptation has been made to suit Thai taste and ideas. The episode deals with the three celestial beings, well known to most of the Thai. They are Mekhala, the Southern Indian Goddess of the Sea and of the Buddhist Jataka, Parasu-Rama, the 6th avatar of Vishnu, and Parjanya, the Vedic Rain God. The three met one another during the early part of the rainy season. Here Mekhala has the character of the Goddess of Lightning, Parasu-Rama (corrupted in Thai as Ramasun i.e. Ram, the Asura and sometimes Parote i.e. Parasu) as the God of Thunder, and Parjanya, in Thai 'Prachun', as the God of Rain. These three characters are partly identical with the Chinese gods and goddesses, but with Indian names. Indochina, where Thailand lies, is therefore aptly named, for the two oldest cultures which met here and influenced the peoples of this Peninsula.

MINOR ARTS: With reference to Thai art, mention must be made of the various branches of the decorative art such as Lacquer work, Silver and Gold work, and Pottery. In all branches of this art Thailand never lacks beautiful objects of high artistic value. Space does not allow one to enlarge in such a brief sketch on so large a subject of Thai culture.

* * * *

The traditional character of the Thai people which finds expression in her arts and literature as briefly sketched above is now tending to change under the influence of the modern industrial world of mechanism and technology. Thailand has become a member of the great family of nations, and has adopted a universal culture which certainly has affected the traditional one. In all departments of life 'Progress' is the watchword. The water in the stream becomes stagnant and dries up if it does not flow and receive new water continually. So also with culture. The old must be adapted and incorporated into the new if it is to live and at the same time to preserve its own identity. Thailand's young artists are now striving to create something new on traditional lines. The result of this attempt cannot be achieved within a short period of time. Here lies a problem which Thailand has to face and for which a solution has to be found in order to preserve her own identity as a member in the society of the United Nations.

THAILAND'S FOREIGN TRADE

1. TRADE BALANCE

(Thousands of Baht)

	Exports (f.o.b.)			Imports (c.i.f.)			
	Port of Bangkok	Provincial Ports	Total	Port of Bangkok	Provincial Ports	Total	Balance
1952	4,626,929	1,214,117	5,841,046	5,410,319	267,631	5,677,950	+ 163,096
1953	4,786,772	1,118,524	5,905,296	6,389,903	235,128	6,625,031	- 719,735
1954	4,680,833	1,496,181	6,177,014	6,805,438	216,089	7,021,527	- 844,513
1955	4,851,462	2,312,544	7,164,006	7,105,321	309,775	7,415,095	- 251,089

Baht value of trade is obtained by converting foreign currencies at free market rate of exchange.

2. TRADE BY MONETARY AREA

(Total for the whole kingdom)

(Thousands of Baht)

	STERLING AREA			DOLLAR AREA			OTHER AREA		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
1954	2,562,996	1,642,761	+ 920,235	1,446,281	1,403,895	+ 42,386	2,167,737	3,974,871	- 1,807,134
1955	2,828,208	2,548,978	+ 279,230	2,277,851	1,481,260	+ 796,591	2,057,947	3,384,857	- 1,326,910

3. TRADE BY COUNTRIES

(Total for the whole kingdom)

(a) EXPORTS

	United States	United Kingdom	Germany	Nether-lands	Switzer-land	Hongkong	India	Singapore	Malayan Federation	Japan	Indo-nesia	Other Countries	Total
1954	1,350,565	185,207	32,690	215,594	2,360	500,797	37,702	967,791	620,461	1,326,232	356,529	631,086	6,177,014
1955	2,097,217	170,484	84,363	210,874	3,470	617,622	32,493	879,996	854,926	1,260,782	192,355	759,424	7,164,006

(b) IMPORTS

1954	1,330,923	933,731	506,029	644,642	105,778	362,781	153,961	39,956	13,801	1,521,842	454,423	953,660	7,021,527
1955	1,444,363	830,637	438,010	616,243	97,095	715,284	166,016	465,049	232,759	1,377,853	242,478	789,308	7,415,095

4. TRADE BY COMMODITY GROUP

(Total for the whole kingdom)

(a) EXPORTS

	Food	Beverages & Tobacco	Crude Materials	Mineral Fuels & Lubricants	Animal & Vegetable Oils & Fats	Chemicals	Manufactured Goods	Machinery	Manufactured Goods	Miscellaneous Transactions	Miscellaneous Goods & Commodities	Total
1954	8,725,221	4,375	2,269,334	31,715	14,728	7,464	60,911	20,821	29,449	12,996	6,177,014	
1955	3,704,572	9,358	3,212,980	—	7,606	11,697	61,916	696	26,567	128,614	7,164,006	

(b) IMPORTS

1954	639,878	121,895	84,347	569,922	27,369	526,492	2,582,143	1,388,371	701,912	379,198	7,021,527
1955	618,441	158,503	83,347	684,580	28,013	576,948	2,752,037	1,367,427	901,964	243,835	7,415,095

5. PRINCIPAL EXPORTS BY MONETARY AREA

(Total for the whole kingdom)

(a) RICE EXPORT

	STERLING AREA	DOLLAR AREA	OTHER AREA	Total
	Metric tons	Baht	Metric tons	Baht
1954	504,350.0	1,465,570	17,210.7	43,179
1955	663,675.8	1,602,857	58,195.4	126,171

(b) RUBBER EXPORT

1954	509.7	4,941	127,534.2	1,038,690	1,850.4	17,103	129,894.3	1,060,734
1955	1,728.6	32,964	128,557.8	1,727,629	2,208.6	38,176	132,495.0	1,798,769

(c) TIN EXPORT

1954	10,869.4	291,372	2,943.5	81,260	40.0	916	13,879.9	373,548
1955	10,892.4	313,162	4,656.3	123,279	131.7	4,065	15,680.4	440,506

FINANCE & COMMERCE

HONGKONG EXCHANGE MARKETS

September 10—15, 1956

U.S.\$

Sept.	T.T. High	T.T. Low	Notes High	Notes Low
10	\$618	615½	615½	613½
11	617½	615½	615	612½
12	616½	615½	614½	612½
13	615½	615½	614½	612½
14	616	615½	614½	613½
15	615%	615	613%	612%

D.D. rates: High 615½ Low 613½.

Trading totals: T.T. US\$2,480,000; Notes cash \$470,000, forward \$2,570,000; D.D. \$495,000. The market remained firm as tension over Suez in-

creased. Some speculators however were unloading. In the T.T. Sector, offers from Japan, Korea, and the Philippines were absorbed by gold and general importers. In the Notes market, the heavy change over interest, HK\$8.45 per US\$1,000 in favour of buyers, curtailed speculative transactions to an average of US\$8 million per day. In the D.D. sector, market was active.

Yen: Cash quotations were \$1,480—1,450 per Yen 100,000. There was no trading in forward, but change over interest favoured buyers and aggregated \$7.30 per Yen 100,000.

Far Eastern Exchange: Highest and lowest rates per foreign currency unit in HK\$: Philippines 1.815—1.77, Japan 0.014675—0.014475, Malaya

1.872, Vietnam 0.0625—0.0588, Thailand 0.2809. Sales: Pesos 460,000, Yen 128 million, Malayan \$450,000, Piastre 16. million, Baht 9 million. Market buoyant with increased volume of overseas Chinese remittance.

Agreed Merchant T.T. rates: Selling and buying rates per foreign currency unit in HK\$: England 16.202—16.10, Australia 13.016—12.757, New Zealand 16.202—15.867, United States 5.839—5.755, Canada 5.97—5.882, India 1.216—1.205, Pakistan 1.218—1.204, Ceylon 1.219—1.207, Burma 1.216—1.205, Malaya 1.889—1.871. Selling rates per foreign currency unit in HK\$: South Africa 16.236, Switzerland 1.333, Belgium 0.117, West Germany 1.389.

Chinese Exchange: People's Bank Yuan quoted \$1.50 per Yuan; Taiwan

Bank Dollar HK\$180—179 per thousand and remittances 162—160.

Bank Notes: Highest and lowest rates per foreign currency unit in HK\$: England 15.88—15.85, Australia 12.50, New Zealand 14.25, Egypt 15.25, South Africa 15.75—15.70, India 1.1875—1.185, Pakistan 0.85, Ceylon 0.98, Burma 0.47—0.46, Malaya 1.84—1.839, Canada 6.2475—6.23, Cuba 4.80, Philippines 1.99—1.975, Switzerland 1.39, West Germany 1.39, Italy 0.00945—0.00935, Belgium 0.105, Sweden 1.00, Norway 0.70, Denmark 0.77, Netherlands 1.43, France 0.0147—0.0146, Vietnam 0.07225—0.07, Laos 0.074—0.073, Cambodia 0.084—0.08, North Borneo 1.50, Indonesia 0.1945—0.187, Thailand 0.275, Macau 0.996.

GOLD MARKET

Sept.	High .945	Low .945	Macau .99
10	\$268½	266½	Low 277
11	267½	265½	
12	266½	265½	278½ High
13	266½	266%	
14	266½	266½	
15	266½	265	

The opening and closing prices were \$266½ and 266½, and the highest and lowest 268½ and 265½. The market was quiet and fluctuations small. Interest for change over favoured sellers and aggregated HK\$3.00 per 10 taels of .945 fine. Tradings averaged 11,500 taels per day and amounted to 69,000 taels for the week, of which 20,280 taels were actual deliveries (3,580 taels listed and 16,700 taels arranged). Speculative positions averaged 28,500 taels per day. Imports were all from Macau and totalled 15,500 taels. Arrivals in Macau amounted to 76,000 fine ounces. Exports amounted to 11,500 taels (7,000 to Singapore, 3,500 Indonesia, 1,000 Vietnam). Differences paid for local and Macau .99 fine were HK\$14.00—13.00 and 12.10—12.00 respectively per tael of .945 fine. Cross rates were US\$37.86—37.84 per fine ounce, while indents eased to 37.85 C.I.F. Macau; 32,000 fine ounces were concluded. US double eagle old and new coins quoted \$271—270 and 227 respectively per coin and Mexican gold coins \$283.50—282.50 per coin.

Silver Market: 500 taels of Bar silver were traded at \$5.87 per tael; 500 dollar coins at \$3.77 per coin; 20 cent coins quoted \$2.88 per 5 coins.

Money Market: In spite of the approach of the Mid-Autumn Festival, the local money market remained easy. Interest rates were: L/Cs 6% per annum; overdrafts 8% to 10%, and mortgages on real estates 10% to 15%. Chinese native banks charged slightly higher rates.

Overseas Chinese Remittance: Remittance from overseas Chinese increased recently with the approach of the Mid-Autumn Festival. Local banks gave following 'unofficial' estimates:

compared with the same period last year, remittance from Malaya and Singapore doubled, from Thailand and Indonesia up by 40%, from Vietnam and Philippines up by 30% and from Australia 40% more. Remittance from US increased from daily average of US\$40,000 to \$60,000 last week. Remittance from Malaya & Singapore increased much more than last year because thousands of students returned to China during the year and their families are sending them money regularly through HK. It was rumoured recently that there had been another influx of 'escaped' capital from Vietnam, Singapore and the Philippines; reliable banking sources explained that this rumour was spread by some real estate speculators to stimulate the value of their investments.

Monday: The market opened dull; prices were fractionally lower. Business amounted to \$395,000. **Tuesday:** There was a slight improvement in business; prices firmed. The turnover amounted to \$628,000. **Wednesday:** Business was on a restricted scale and fluctuations small. The turnover amounted to \$600,000. **Thursday:** Trading was moderate; prices tended to ease. The turnover amounted to \$823,000. **Friday:** With operators still adopting a cautious view, price movements were few and small. The turnover amounted to \$740,000.

A. R. Burkhill & Sons (Hongkong) Ltd., the General Managers of Amalgamated Rubber Estates Limited, announced that the output from the Estates for August 1956 amounted to 627,268 lbs.

HONGKONG SHARE MARKET

September 10-14, 1956

The Suez deadlock restrained trading in the local stock exchange; business amounted to a little over \$3 million during the week. Interests were centred on Utilities, Cements, Stores, Hotels and Lands. Prices slipped a little further down under selling pressure particularly when Chinese banks liquidated more holdings. HK Banks fluctuated between 1620 and 1640 and lost \$15 on the week. Investment companies, rubbers and cottons were quiet. Yields of many shares improved sharply as a result of recent price-drops; limited amount of speculative buying was registered. Closing rates for Hotels, Dairy Farms, Yaumatis, Docks, Cements, Electrics, Lights (o) and Telephones (n) were firmer but still lower than those for the previous week:

Shares	Sept. 7	Last Week's Rates			Ups and Downs
		Highest	Lowest	Closing	
HK Bank	1635	1640	1620	1620	-\$15
Union Ins.	1000 b	1005	1000 b	1005 b	+\$5
Wheelock	8.80	8.80	8.70	8.70	-10¢
HK Wharf	91	91	89.50 b	89.50 b	\$1.50
HK Dock	41.75 s	41.50	40.75	41	-\$75¢
Provident	13.90	13.80	13.60	13.60	-30¢
Land	67.50	67.50	66 s	66 s	-\$1.50
Realty	1.475 s	1.475 s	1.40 b	1.45 n	barely steady
Hotel	15.50 s	15.40	15	15.20	-\$30¢
Trams	23.40	23.50	23.30	23.30	-\$10¢
Star Ferry	136 b	138 s	135	135	-\$1
Yaumati	109	110 s	107	108	-\$1
Light (o)	24.50	24.40	24.10	24.30	-20¢
Light (n)	22 s	21.60	21.50	21.50	-\$50¢
Electric	31	31.25	30.50	30.75	-25¢
Telephone (o)	25	24.80	24.50	24.50	-\$50¢
Telephone (n)	24 s	23.80	23.40	23.60	-40¢
Cement	36.75	36.75	36.25	36.50	-\$25¢
Dairy Farm	15.90	15.90	15.50	15.60	-\$30¢
Watson	12.20 b	12.60	12	12.20 b	steady
Yangtze	6.70	6.70	6.60 b	6.70 n	steady
Allied Invest.	5.10 s	5.10 s	5 s	5 s	-\$10¢
HK & FE Invest.	10.50	10.60 n	10.40	10.60 n	steady
Amal. Rubber	1.475	1.475	1.45	1.50 s	steady
Textile	4.40	4.40	4.35 b	4.40 b	steady
Nanyang	7.40 s	7.60 s	7.25	7.25	steady

SINGAPORE SHARE MARKET

(August 25-31, 1956)

Turnover was slightly better. Industrials had a few gains but no general upward tendency. Tins moved erratically, starting the week with sellers predominant but closing on a better note. Rubbers had increased enquiry and a greater turnover.

Sime Darby were in substantial demand and closed at \$2.02, McAlisters with their accounts due this month had buyers at \$2.90, but no shares available even at a few cents higher, and Straits Times had buyers at \$2.87½. United Engineers were more favoured and British Borneo Petroleum touched a new high at 62/6 including stamp.

There was an isolated transaction in Kokam Tin at \$1.25, Petaling were

neglected and gradually subsided to \$3.20, Sungai Way attracted buyers as also did Taiping Consolidated with business at \$1.50.

Austral Amalgamated came back to 16 $\frac{1}{2}$ ex on heavy offerings but recovered finally to business at 17/- delayed delivery. Kuala Kampar having risen rapidly fell off to 32/6 sellers on profit taking and Kampong Lanjut on persistent enquiry improved to 38/6 buyers.

London supplied Bukit Sembawang and Langkiong North Borneo Prefs. & Ords. Locally, Benta were in demand at \$1.01, Glenealy at \$1.65 and Kuala Sidim at \$1.82 $\frac{1}{2}$. On the recurrence of the rumour of the sale of part of the estate Sungai Tukang moved quickly from \$1.58 to \$1.90. Other counters influenced by sale rumours were Telok Anson which had possible buyers at \$1.45 and Kempas which moved up to \$1.82 $\frac{1}{2}$ buyers. The latest International Rubber Study Group figures are satisfactory in that world consumption of natural exceeded production by 10,000 tons in the month of June and the total excess consumption over production for the first half of the year was 95,000 tons. Again, from the point of view of the producer the average price for the year ended 30th June 1956 was \$1.13 $\frac{1}{2}$ per lb. though this should only be regarded as a luxury figure, hardly likely to be repeated in the near future.

There were few dealings in local Loans.

Western Titanium were taken from Australia up to A.8/11 and Oil Search at A.15/3.

BUSINESS DONE 25TH TO 31ST AUGUST

Industrials: British Borneo Pets. 62/6, Fraser & Neave Ords. \$1.97 $\frac{1}{2}$ & \$1.95, Gammons \$1.95 & \$1.94, Hammer & Co. \$2.85 to \$2.87 $\frac{1}{2}$ to \$2.85 c.d. Hume Industries A.5/3 & A.5 $\frac{1}{2}$, Wm. Jacks \$2.77 $\frac{1}{2}$ to \$2.80, Jackson & Co. \$1.32 $\frac{1}{2}$, Malayan Breweries \$2.87 $\frac{1}{2}$, Malayan Cement \$1.62 & \$1.65, Malayan Collieries \$1.10 & \$1.09, Metal Box \$1.53 $\frac{1}{2}$, McAlisters \$2.85 to \$2.90, Robinson Ords. \$1.56 $\frac{1}{2}$ & \$1.57 $\frac{1}{2}$ c.d.b. Sime Darby \$1.95 to \$2.00, Straits Times \$2.85 & \$2.87 $\frac{1}{2}$, Straits Traders \$25.00 & \$24 $\frac{1}{2}$, Uniteer Ords. \$8.60.

Tins: Aokam \$1.25, Hong Fatt \$1.11, Klang River 99 cents, Kuchais \$1.85, Petaling \$3.22 $\frac{1}{2}$ & \$3.20, Rahman Hyd. 72 cents, Rantau \$1.47 $\frac{1}{2}$ & \$1.48, S. Ways \$3.34, Taiping \$1.50, Telok Kruin \$1.42 $\frac{1}{2}$, Austral Amal. 16/7 $\frac{1}{2}$ to 17/-, K. Lanjut 38/- & 37/9 to 38/6, K. Kampar 32/3 to 32/6, Larut 7/10 $\frac{1}{2}$ c.d., Lower Perak 17/4 $\frac{1}{2}$ to 17/6 to 17/1 $\frac{1}{2}$ c.c.r., Rawang Con 29/5 & 29/-, Tongkal Harbour 9/-, Pahang Consol. 11/9, S. Kinta 15/-.

Rubbers: B. Sembawang 3/6 & 3/7, Benta \$1.00 & \$1.01, Borelli \$2.52 $\frac{1}{2}$, Glenealy \$1.65, Jimah \$1.20, Kempas \$1.75 to \$1.82 $\frac{1}{2}$, Kuanang \$1.16 c.d., Kuala Sidim \$1.80 to \$1.82 $\frac{1}{2}$, Langkiong Ords. 1/11, Langkiong Prefs. 2/1, Lunas 85 cents, Selangor Coconuts \$1.10, S. Tukang 1.62 $\frac{1}{2}$ to \$1.90, Telok Anson \$1.40.

Overseas Investment: British. Associated Elec. Industries 74/7 $\frac{1}{2}$ & 75/-, Bisichi Tin 3/11, British Petroleum 160/6 & 160/-, Burmah Oil 95/-, De Beers Consol. 109/4 $\frac{1}{2}$, De Havilland 22/1, Gaumont British News 11/4 $\frac{1}{2}$, Hudson Bay 227/-, Imperial Chemical Industries Ords. 46/-, Milford-Docks 64/3, Strand Elec. Holdings 7/9 $\frac{1}{2}$.

South African: Tanganyika Concs. £7-5/16.

Australian: Australian Cement A42/-, Burnt Philip A.53/3, Dunlop (Aus.) A30/1 to A30/7, Foyer Gibson (W.A.) A.32/-, Gold mines of Kalgoorlie A.17/1 $\frac{1}{2}$, Great Western Consol. A.4/4, Northern Hercules A.6d. Oil Search A15/3, Western Titanium A.8/9 to A.8/11.

was a good demand for Industrial generally.

Kuala Kampar on small turnover quickly climbed to 35/-, Lower Perak had a quiet week and slipped to 16/9 but closed 16/10 $\frac{1}{2}$ c.c.r. buyers, and Rawang Tinfields had increased turnover mostly at 9/4 $\frac{1}{2}$. In anticipation of better outputs from the big Puchong No. 2 dredge Austral Amalgamated had a substantial turnover and were taken to 17/1 $\frac{1}{2}$ ready and 17/3 delayed.

Of London Registered Tins, Malayan Tin with the output for the year ended June 1956 double that of the previous year, had further enquiry and closed at 10/9.

Transactions in the Rubber section were generally small. London supplied Langkiong North Borneo Prefs. and Ords., Riverview, Bukit Sembawang and Serom Rubber. Sungai Tukang came back to \$1.82 $\frac{1}{2}$ as there has been no announcement as to whether all or any of the Estate has been sold. Kempas were taken to \$1.90 and Telok Anson were in demand at \$1.45.

There was an increased turnover in both local tax free and taxables.

Oil Search after falling below A15/- recovered to A17/10 and Western Titanium were firm at A9/3.

HONGKONG AND FAR EASTERN TRADE REPORTS

September 9—15, 1956

As a result of the Suez deadlock, London underwriters increased insurance rates covering war and strike, riots and civil commotion to five shillings per cent on cargo shipments through the Suez Canal. The Peninsular and Oriental Steamship Line announced on September 13 in London that all its ships serving Australasia and the Far East would go by the Cape route instead of using the Suez to avoid threatened blockade of the Canal caused by the shortage of pilots. This change of route will increase the freight cost and prolong the journey for shipments between Europe and the Far East. (On September 17, Far East Conference Lines announced a 15% increase in freight charges for shipments between Europe, including U.K., and the Far East).

With the approach of the Mid-Autumn Festival (Sept. 19), overseas Chinese remittance increased. The local money market was bursting with idle cash but banks were very careful in granting loans and overdrafts. Interest rates remained high: 6% p.a. on L/Cs, 8% to 10% on overdrafts, 10% to 15% on mortgage loans and 7% to 8% on export packing credits.

China Trade: After Singapore and Malayan businessmen had bought sub-

stantial quantities of Chinese textiles, cement and rice, Peking finally ordered 2,000 tons of rubber from Singapore and 1,000 tons from Malaya. Other commodities still under negotiation by last week-end were Chinese soya beans, canned goods, foodstuffs, sugar, silks, glassware, steel bars, medicines, handicrafts and other light industrial products in exchange for coconut oil, copra, timber logs, tin and spices from Singapore and Malaya. Contracts concluded last week between Japanese businessmen and Peking officials included Japan's purchases of 550,000 tons of Kailan coal, £15,000 worth of animal hides and China's orders for 30,000 pounds of rayon, £9,000 worth of fishing equipment and large quantities of galvanized iron sheet, tinplate and other steel products. To the local market, China shipped 1,000 bales each of groundnut kernel, sesame and mustard seed towards weekend. Foodstuffs still constituted the chief imports from the Mainland. About 800 live cattle and 2,500 hogs arrived last week. Chinese sawn pine wood and plywood are enjoying growing local demand and providing keen competition to Japanese and other products. Shipments of galvanized iron wire and iron wire nails to the local market suspended and consignments of

paper, cement and other industrial products greatly curtailed. Peking's purchases of steels from here slowed down on account of recent price increases. Orders were placed through local firms for UK and German pharmaceuticals.

Japan Trade: Dealers booked substantial quantities of rayon and fibre yarn, cotton and woollen textiles, woollen knitting yarn, sundries and paper from Japan last week. Japan's purchases from the local market remained active particularly in steel products and scraps. At the beginning of last week Japan slowed down the procurement of steel bars and plates from here because it was estimated that the import of 200,000 tons of steel products including semi-finished steel from world-wide sources had been completed. However, it was later learned that quota for steel plate had not been fulfilled; more supply was therefore procured from here. Tokyo is now considering to import from various sources an additional 216,980 tons of steels comprising: sheet bar 26,400 metric tons, billet 12,000, slab 5,800, steel ingot 20,556, bloom 275, thick steel plate 44,356 black sheet 30,864, bars 57,517, shapes 4,383, wire rod 1,410, hoop 6,196, pipe 362, rail 260, silicon steel sheet 323, old rail 7,276 and rerolled steel 982 metric tons. To handle the increased volume of direct shipments between Japan and China, Japanese shipping firms are placing more ships on the China route. Some companies plan to transfer domestic navigation ships to the China route. The Japanese products exhibition in China will run for 3 weeks in Peking beginning October 2; it will then be moved to Shanghai for 3 weeks opening on December 1. The Japan Machinery Export Association is planning to re-fit the 8,800-ton Nissho Maru into a "floating exhibition" for displaying Japanese machinery. The ship will call at Saigon during December and will then proceed to Bangkok, Rangoon, Colombo, Bombay, Karachi, Singapore, Djakarta and Manila spending two to three days at every port. Among the exhibits will be vessels, rolling stock, engines, electrical appliances, communications equipment, automobiles, bicycles, optical instruments, textile machinery, sewing machines, mining equipment, printing machinery, air conditioning units and hydro-electric equipment.

Malaya & Singapore: Businessmen in Singapore and Malaya were disappointed at China's order for only 3,000 tons of rubber; they had offered to China 100,000 tons a year. Meanwhile, more than 100 persons applied to join the unofficial Singapore-Malaya trade mission to Taiwan which will leave for Taipei on October 7. HK-Singapore trade remained active; one ship brought here 1,000 tons of charcoal, firewood, and smoke sheet. Exports to Singapore and Penang consisted chiefly of foodstuff and sundries.

Indonesia Trade: Under government encouragement, traders in Djakarta sent here more exports; about 3,000 tons of Indonesian staples reached here last week including 2,000 tons of sugar, 9,000 bundles of rattan cord, 400 cases of tea, 125 bags of coffee beans. In return, HK shipped more local manufacturers to Djakarta; three steamers left here for Indonesia with about 1,000 tons of textiles, enamelware, underwear, vacuum flask, fishing net, rainwear, preserved ginger and garlic.

Thailand Trade: Over 10,000 tons of rice, 300 head of live cattle and large quantities of timber, groundnut oil, green pea, sesame, maize and groundnut kernel reached here from Bangkok last week. Bangkok's purchases from the local market also improved; 3 ships left here for Bangkok with about 2,000 tons of exports consisting mainly of Chinese foodstuff, iron nails, window glass, sewing machine, paper and sundry provisions. HK manufactures which enjoyed steady demand from Thailand included enamelware, textiles and knitwear.

Korea Trade: Korea's ICA imports for the 6-month period beginning October will total \$60.7 million including industrial chemicals \$1.5 m., cotton yarn \$1 m., newsprint \$1 m., other paper \$1 m., steel \$2.5 m., and pharmaceuticals \$2.5 m. In the local market last week, Korea remained the No. 1 buyer for paper. Over 5,000 tons of paper, metals, rayon yarn, textiles, cotton yarn, woollen knitting yarn, etc. were shipped to Pusan during the past fortnight by three steamers.

Taiwan Trade: Taipei plans to export about 260,000 metric tons of salt to following countries before year-end: 250,000 to Japan, 3,700 to the Philippines, 340 to Ryukyu, 500 to Hongkong and 55 tons to Borneo. To the local market, Taipei promised to ship before Sept. 19, 3,000 live hogs to meet the demand during the Mid-Autumn Festival. Taipei last week accused some HK exporters of misrepresenting Taiwan garlic in the international market, particularly in re-exports to the Philippines. The Central Trust of Taiwan pointed out that there was an overflow of Communist garlic in HK and merchants here were deliberately misrepresenting this commodity from Mainland as produced in Taiwan. From the local market Taiwan made selective purchases of industrial chemicals and pharmaceuticals.

The Philippines: The Philippine Consul here, Mr. Eduardo L. Rosal last week required local shippers to establish whether the garlic they were sending to Manila was from Taiwan as they had claimed. This job of differentiating Taiwan garlic from Chinese garlic and HK vermicelli from Chinese

vermicelli is indeed a tough job even for experts, if there are such experts!

Trade with UK: Cargo movements between HK and UK slowed down after the recent rush. One steamer arrived during the week with 4,200 tons of black plate, steel bars, mild steel plate cutting, woollen knitting yarn, woollen and cotton piecegoods, industrial chemicals, dyestuff and foodstuff.

Trade with US: HK manufactured camphor tablets can now be shipped to US if covered with comprehensive certificates of origin.

Trade with Europe: Three ships brought over 7,000 tons of commodities from Europe including Dutch fertilizer, foodstuff and dairy products; Italian rayon yarn, woollen piece goods, blankets, and dyestuff; Belgium steel products; and West German electric appliances, automobiles, trucks, plastic moulding compound, Xmas decorating goods, and industrial chemicals. Exports totalled about 1,200 tons consisting chiefly of HK manufactured enamelware, rubber shoes, torch, ratanware, toys and umbrella. Exports of China produce reduced to insignificant quantities of a few selective items only.

Vietnam, Cambodia and Laos: Vietnam and Cambodia slowed down shipments of staples to HK and consequently reduced purchases from here. Laos procured supplies from HK via Thailand and Cambodia.

India & Pakistan: India continued to buy from the local market, Chinese cassia lignea and HK manufactures such as torch and shirts. Imports from India included 100 bales of cotton, 40 bales of yarn and 20 bales of cloth. Pakistan cotton yarn remained competitive in the local market. From here, Pakistan bought refractory blocks, torch, enamelware, underwear and cotton piecegoods.

Burma & Ceylon: Exports to Burma were limited to small quantities of old newspaper, transparent cellulose paper, wheat flour and foodstuff. Burmese rice and other staples remained unpopular in the local market. Due to the shortage of shipping space, over 4,000 tons of consignments including 1,000 tons of beans again accumulated here awaiting shipments to Colombo. Enquiries reached here from Colombo last week covered shirts, buttons, underwear, bra, and enamelware.

Africa Trade: 600 tons of enamelware and other HK manufactures were shipped to West Africa via Europe. Imports from South Africa included 100 tons of peanut butter, curry, wool top, leather and canned food. To East Africa, HK sent about 150 tons of torch, cotton and rayon textiles and vacuum flasks. Orders from South

Africa were mostly for cotton piece goods, enamelware and torch.

China Produce: Demand from Europe and SE Asia was selective and weak. Japan was very keen on beans and oil seeds but short stock restricted trading. Towards end of week, China shipped here 1,000 bales each of sesame, mustard seed and groundnut kernel. These imports, however, were far from sufficient to meet the demand from Japan. Trading in many popular items such as groundnut kernel, maize, sesame, and beans depended mostly on supplies from Thailand and other SE Asian countries. Bristles were imported from Europe and UK to meet demand from Japan and feathers were imported from Taiwan and SE Asia and processed here for exports to Europe. Cassia lignea retained strong demand from India, Pakistan, Europe and Indonesia; groundnut kernel was popular with Singapore, Japan and local pressing mills; and garlic registered heavy shipments to Singapore, Indonesia, Vietnam and Philippines.

Metals: Japan returned to the local market for more steel plate. Next year's forward cargoes were transacted. Dealers here found it difficult to get new indent offers from UK and Europe because Japan was also buying from Europe direct. Speculators shipped steel plate and bars back from Singapore to meet the demand in the local market and local iron works turned down orders for bars because raw materials were difficult to obtain. Prices continued to advance partly due to Japan's hoarding but more on account of marked-up indents and the lack of near forwards. Freight for steel products from Europe to HK has increased from 30/- to 95/- per ton since June and it is believed that beginning October, the rate will go up to 125/- per ton with probably another increase in January to 160/- per ton. China stopped buying steel plate and steel bars from here because local prices were too expensive for her. However, she still

absorbed substantial quantities of iron pipes, iron wire rod, steel window sash bars, and black plate. Demand from SE Asia was limited to Thailand's order for structural steel and iron wire nail and Cambodia's purchase of wire nails.

Paper: Korea remained keen in European and US paper but there were more enquiries than orders because exchange allocations were slow in Seoul. Supply of Chinese paper was curtailed and stock here dwindled under steady demand from local users and SE Asia. Japanese paper was therefore purchased by Thailand and other SE Asian buyers. Market trends are (1) US and European supplies will become more and more difficult to get; (2) China will continue to send here various kinds of paper but quantities of these consignments will not be substantial; (3) Korea might procure more supply from Japan direct but at the present her direct imports from Japan include only newsprint in reels, duplex board and tissue. Meanwhile, enquiries from Korea reached here last week were for 200 tons newsprint in reels, 3,000 reams woodfree, 500 reams white sulphite, 400 reams transparent cellulose paper, 2,000 reams glassine, 1,000 reams aluminium foil and 500 reams duplex board. The market was also stimulated by demand from Thailand for newsprint, poster, m.g. cap, tissue; from Vietnam for woodfree, kraft; from Indonesia for woodfree, transparent cellulose paper, kraft; from Burma for transparent cellulose; and from Cambodia for kraft.

Industrial Chemicals: The market was quiet; prices were steady on advanced indents. Demand from Taiwan included ferrous oxide, shellac and stearic acid. Korea was interested in gum copal and damar and Thailand in chlorate of potash.

Pharmaceuticals: China bought through local firms 9 million vials of penicillin crystalline procaine of 400,000 units from UK and substantial quantities of antipyrin and

amidopyrin from Germany. Aspirin and phenacetin powders were steady on orders from Thailand; vitamin B1, potassium iodide and lyzol solution were favoured by Taiwan; dihydrostreptomycin, penicillin tablets, isoniazide tablets, caffeine alkaloid and liver extract registered strong local demand; and santonin crystal firmed on enquiries from the Philippines.

Cotton Yarn: HK yarn of 10's and 20's retained steady local demand after prices marked down to \$760 and \$900/\$1,020 per bale respectively. Pakistan yarn dropped further to \$880 per bale for 20's and \$1,210 per bale for 32's; trading, however, slowed down. Japanese yarn (32's) remained firm on short stock and orders from Thailand. Indian yarn was sluggish; 10's declined to \$760 per bale and 20's to \$860.

Cotton Piece Goods: HK cotton piece goods remained firm; Japanese grey turned sluggish; Chinese grey declined after Indonesia suspended purchases from here.

Rice: Heavy arrival from Thailand, drop in indent prices and slow trading forced prices of most grades and types down.

Wheat Flour: Local demand was slow. Prices were steady on increased cost. Burma enquired for HK products but no transaction was concluded during the week.

Sugar: Heavy supply from Taiwan plus 2,000 tons from Indonesia depressed the local sugar market. Local demand was limited and exports slow.

Sundry Provisions: Thailand provided strong demand for various popular items but supply from Japan and China was abundant; prices weak. Singapore and Malaya turned to China for direct supplies.

Cement: Imports from China were curtailed while supply from Japan continued; both indents were offered at \$115 per ton cif HK, October shipment.